

SEQUENCE LISTING

<110> Millennium Pharmaceuticals, Inc.

McCarthy, Sean A
Fraser, Christopher C
Sharp, John D
Barnes, Thomas S
Kirst, Susan J
Mackay, Charles R
Myers, Paul S
Leiby, Kevin R
Wrighton, Nicolas
Goodearl, Andrew
Holtzman, Douglas A

<120> NOVEL GENES ENCODING PROTEINS HAVING
PROGNOSTIC, DIAGNOSTIC, PREVENTIVE, THERAPEUTIC, AND OTHER
USES.

<130> MPI00-5350MNIM

<140> US 09/759,130

<141> 2001-01-12

<150> US 09/479,249

<151> 2000-01-07

<150> US 09/559,497

<151> 2000-04-27

<150> US 09/578,063

<151> 2000-05-24

<150> US 09/333,159

<151> 1999-06-14

<150> US 09/596,194

<151> 2000-07-14

<150> US 09/342,364

<151> 1999-06-29

<150> US 09/608,452

<151> 2000-06-30

<150> US 09/393,996

<151> 1999-09-10

<150> US 09/602,871

<151> 2000-06-23

<150> US 09/420,707

<151> 1999-10-19

<160> 460

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 5121

<212> DNA

<213> Homo sapiens

<400> 1

```
gttttagtctg cagccgagca gctaaaggga gaaagaatcg ctcaggaaag acacactgca 60
gactccaccg gcaccctgca atagatgggt tccgactaca caagggagaa aacgcggagg 120
tgacactctc ctgcctggaa agaggacgaa cgaccaaaaca aacgcaagga ctggactcca 180
tgccgaaggt atctggaagt cgtgacacgg tgtgtataaa acaaaagttt gcgagctgtt 240
aattgctgtg ctgtgttatt aagagacgct ttcaagtttc aagtaccaa tgtagcttta 300
cgttgccaaa ggaagttgag gcaattgctt tgctgtttta acttgctctg tgagggaaat 360
ctcataaact gaccaatgca ccaaataaat gctaaaatgc actttagggt tgtttttgca 420
cttctgatag tatctttcaa ccacgatgta ctgggcaaga atttgaaata caggatttat 480
gaggaacaga ggggtggatc agtaattgca agactatcag aggatgtggc tgatgtttta 540
ttgaagcttc ctaatccttc tactgttcga tttcgagcca tgcagagggg aaattctcct 600
ctacttgtag taaacgagga taatggggaa atcagcatag gggctacaat tgaccgtgaa 660
caactgtgcc agaaaaactt gaactgttcc atagagtttg atgtgatcac tctaccaca 720
gagcatctgc agcttttcca tattgaagt gaagtgtctg atattaatga caattctccc 780
cagttttcaa gatctctcat acctattgag atatctgaga gtgcagcagt tgggactcgc 840
attccctggg acagtgcatt tgatccagat gttggggaaa attccctcca cacatactcg 900
ctctctgcca atgattttt taatatcgag gttcggacca ggactgatgg agccaagtat 960
gcagaactca tagtggtcag agagttagat cgggagctga agtcaagcta cgagcttcag 1020
ctcactgcct cagacatggg agtacctcag aggtctggct catccatact aaaaataagc 1080
atttcagact ccaatgacaa cagccctgct tttgagcagc aatcttataat aatacaactc 1140
ttagaaaaact ccccggttgg cactttgtct ttagatctga atgccacgga tccagatgag 1200
ggcgctaatt ggaaaattgt atattccttc agcagtcatt tgtctcccaa aattatggag 1260
acttttaaaa ttgattctga aagaggacat ttgactctt tcaagcaagt ggattatgaa 1320
atcaccaaat cctatgatag tgatgttcag gctcaagatt tgggtccaaa ttcaatccca 1380
gccattgca aaattataat taaggttgtg gatgttaatt acaataaacc tgaaattaac 1440
atcaacctca tgtcccctgg aaaagaagaa atatcttata tttttgaagg ggatcctatt 1500
gatacatttg ttgcttttgt cagagttcag gacaaggatt ctgggctgaa tggagaaata 1560
gtttgtaagc ttcatggaca tggtcacttt aaacttcaga agacatatga aaacaattat 1620
ttaatcttaa ctaatgccac actggataga gaaaagagat ctgagtatag tttgactgta 1680
atcgctgagg acagggggac acccagtcct tctacagtga aacattttac agttcaaata 1740
aatgatatac atgacaatcc accccacttc cagagaagcc gatatgaatt tgtaatttca 1800
gaaaataact caccaggggc atatatcacc actggttacg ccacagatcc tgatcttggg 1860
gaaaatgggc aagtgcacata caccatcttg gagagtttta ttctaggaag ttccataact 1920
acatatgtaa ccattgaccc atctaattgga gccatctatg ccctcagaat ctttgatcat 1980
gaagaagtga gtcagatcac ttttgtggta gaagcaagag atggaggaag cccgaagcaa 2040
ctggtaagca ataccacagt tgtgtccacc atcattgacg aaaatgacaa cgttcctgtg 2100
gttatagggc ctgcattgag taataatacg gcagaaatca ccattcccaa aggggctgaa 2160
agtggctttc atgtcacaag aataagggca attgacagag actctgggtg gaatgctgaa 2220
ctcagctgag ccatagtagc aggtaatgag gagaatatct tcataattga tccacgatca 2280
tgtgacatcc ataccaacgt tagcatggat tctgttccct acacagaatg ggagctgtca 2340
gttatcatcc aggacaaagg caatcctcag ctacatacca aagtccttct gaagtgcatt 2400
atctttgaat atgcagagtc ggtgacaagt acagcaatga cttcagtaag ccaggcatcc 2460
ttggatgtct ccatgataat aattatttcc ttaggagcaa tttgtgcagt gttgtctggt 2520
attatgggtg tatttgcaac taggtgtaac cgcgagaaga aagacactag atcctataac 2580
tgcaggggtg ccgaatcaac ttaccagcac caccacaaaa ggccatccc gacagattcac 2640
aaaggggaca tcacattggt gcctaccata aatggcactc tgcccatcag atctcatcac 2700
agatcgtctc catcttcatc tctacctta gaaagagggc agatgggcag ccggcagagt 2760
cacaacagtc accagtcact caacagtttg gtgacaatct catcaaacca cgtgccagag 2820
aattttctcat tagaactcac ccacgccact cctgctgttg agcaggtctc tcagcttctt 2880
tcaatgcttc accaggggca atatcagcca agaccaagtt ttcgaggaaa caaatattcc 2940
```

aggagctaca	gatatgccct	tcaagacatg	gacaaattta	gcttgaaaga	cagtggccgt	3000
ggtgacagt	aggcaggaga	cagtgattat	gatttggggc	gagattctcc	aatagatagg	3060
ctgctgggtg	aaggattcag	cgacctgttt	ctcacagatg	gaagaattcc	agcagctatg	3120
agactctgca	cggaggagt	cagggtcctg	ggacactctg	accagtgtctg	gatgccacca	3180
ctgccctcac	cgtcttctga	ttataggagt	aacatgttca	ttccagggga	agaattccca	3240
acgcaacccc	agcagcagca	tccacatcag	agtcttgagg	atgacgtctca	gcctgcagat	3300
tccggtgaaa	agaagaagag	tttttccacc	tttggaagg	actcccaaaa	cgatgaggac	3360
actggggata	ccagcacatc	atctctgtctc	tcggaaatga	gcagtgtgtt	ccagcgtctc	3420
ttaccgcctt	ccctggacac	ctattctgaa	tgcagtgagg	tggatcggtc	caactccctg	3480
gagcgcagga	agggaccctt	gccagccaaa	actgtgggtt	acccacaggg	ggtagcggca	3540
tgggcagcca	gtacgcattt	tcaaaatccc	accaccaact	gtgggcccgc	acttggaact	3600
cactccagt	tgcagccttc	ttcaaaatgg	ctgccagcca	tggaggagat	ccctgaaaaa	3660
tatgaggaag	atgattttga	caatgtgtctc	aaccacctca	atgatgggaa	acacgaactc	3720
atggatgcca	gtgaactggt	ggcagagatt	aacaaactgc	ttcaagatgt	ccgccagagc	3780
taggagattt	tagcgaagca	tttttgtttc	catgtatatg	gaaataggga	acaacaacaa	3840
caacaaaaaa	ccctgaaaga	actggcattg	caaataagtt	gcatttatca	taaatgtgtc	3900
tgtgtatatt	gaatattaaa	tactgtattt	tcgtatgtac	acaatgcaag	tgtgattatt	3960
ttaatctgta	ttttaaaaaa	acatttgtac	cttatattta	tgtgtaattt	aacaaaacaaa	4020
ttttattttt	ttactcccat	gacagacatg	tttttcctag	tcgtgtagaa	actagccact	4080
gttcaaactc	gatacactat	tcaaccacaa	agtgtaaagg	cactgcttag	attagttttg	4140
ttggggaaga	attattatgt	tgtatgaaca	acccactga	agcattatac	aattcttaat	4200
tccattaagt	gatcccactt	tttttcaata	actttttaga	aattaagaat	cattaaaaat	4260
gttaagctat	tttattgtta	ttttctctac	tttctactag	ccccaatagt	tgaactctta	4320
taggaaaatc	gaaagataaa	gtgaaagttt	atttcaggac	tgagaaatat	cttgaagggt	4380
atattattaga	tgactatctc	aaatgaactt	tttatagaca	atgatgaaaa	cagaactaaa	4440
gtcaatgttt	cctgactccc	aggcccctac	tattccaggc	catcacactg	gcctgttccg	4500
gagaatat	ctctcacaa	attattatct	acttataatt	atggtaaaca	ataaatttta	4560
ttccatcctt	gtagtatgaa	acatgctcca	aggaaatgga	atctgtcctt	taaatggata	4620
acagtatgtg	ttctaattggc	ataaaaatatt	actggataaa	aacagttgtg	tcagtgtctc	4680
tcctaaggta	gtaaatataa	tgacttatt	ctgaacccat	tctattttga	atctcccctt	4740
tcctctcaca	ataactgaac	attttaatct	tttggaatat	tgtctttctt	tgttataact	4800
attcattttt	agcttttgtc	tccagtgcac	gatctcatat	ttttgctttt	atttttagta	4860
taagaacatt	tataaaatca	tatttttgtt	actgcaattg	ttttatttgt	tgtgtggcaa	4920
atgagaaaac	ctttatttat	tgtgtgtgtg	tctctctgtg	tggaatgcct	tggtagagaga	4980
gatgcttatt	atgactatta	tcatctctga	ccaagcttct	attaatgtta	tttctaataa	5040
tacactatct	tgattgtact	ctccagaaaa	tttttctgtc	agtgaaaata	aaagaaaaat	5100
taaagtaaaa	aaaaaaaaaa	a				5121

<210> 2
 <211> 3405
 <212> DNA
 <213> Homo sapiens

<400> 2						
atgcacacaaa	tgaatgctaa	aatgcacttt	aggtttgttt	ttgcacttct	gatagtatct	60
ttcaaccacg	atgtactggg	caagaatttg	aaatacagga	tttatgagga	acagagggtt	120
ggatcagtaa	ttgcaagact	atcagaggat	gtggctgatg	ttttattgaa	gcttccta	180
ccttctactg	ttcgatttcg	agccatgcag	aggggaaatt	ctcctctact	tgtagtaaac	240
gaggataatg	gggaaatcag	cataggggct	acaattgacc	gtgaacaact	gtgccagaaa	300
aacttgaact	gttccataga	gtttgatgtg	atcactctac	ccacagagca	tctgcagctt	360
ttccatattg	aagttgaagt	gctggatatt	aatgacaatt	ctccccagtt	ttcaagatct	420
ctcataccta	ttgagatatc	tgagagtgtc	gcagttggga	ctcgcatctc	cctggacagt	480
gcattttgatc	cagatgttgg	ggaaaattcc	ctccacacat	actcgctctc	tgccaatgat	540
ttttttaata	tcgaggttcg	gaccaggact	gatggagcca	agtatgcaga	actcatagt	600
gtcagagagt	tagatcggga	gctgaagtca	agctacgagc	ttcagctcac	tgccctcagac	660

```

atgggagtag ctcagagggtc tgggtcatcc atactaaaaa taagcatttc agactccaat 720
gacaacagcc ctgcttttga gcagcaatct tatataatac aactcttaga aaactccccg 780
gttggcactt tgctcttaga tctgaatgcc acggatccag atgagggcgc taatgggaaa 840
attgtatatt ccttcagcag tcatgtgtct cccaaaatta tggagacttt taaaattgat 900
tctgaaagag gacatttgac tcttttcaag caagtggatt atgaaatcac caaatcctat 960
gagattgatg ttcagggtca agatttgggt ccaaattcaa tcccagccca ttgcaaaatt 1020
ataattaagg ttgtggatgt taatgacaat aaacctgaaa ttaacatcaa cctcatgtcc 1080
cctggaaaag aagaaatatc ttatatTTTT gaaggggatc ctattgatac atttgttgct 1140
ttgggtcagag ttcaggacaa ggattctggg ctgaatggag aaatagtttg taagcttcat 1200
ggacatgggtc actttaaact tcagaagaca tatgaaaaca attatttaat cttaactaat 1260
gccacactgg atagagaaaa gagatctgag tatagtttga ctgtaatcgc tgaggacagg 1320
gggacaccca gtctctctac agtgaaacat tttacagttc aaatcaatga tatcaatgac 1380
aatccacccc acttccagag aagccgatat gaatttgtaa tttcagaaaa taactcacca 1440
ggggcatata tcaccactgt tacagccaca gatcctgatac ttggagaaaa tgggcaagtg 1500
acatacacca tcttggagag ttttatttcta ggaagtcca taactacata tgtaaccatt 1560
gacctatcta atggagccat ctatgccctc agaactcttg atcatgaaga agtgagtcag 1620
atcacttttg ttgtagaagc aagagatgga ggaagccga agcaactggg aagcaatacc 1680
acagttgtgc tcaccatcat tgacgaaaat gacaacgttc ctgtgggttat agggcctgca 1740
ttgcgtaata atacggcaga aatcaccatt cccaaagggg ctgaaagtgg ctttcatgtc 1800
acaagaataa gggcaattga cagagactct ggtgtgaatg ctgaactcag ctgcgccata 1860
gtagcaggta atgaggagaa tatcttcata attgatccac gatcatgtga catccatacc 1920
aagttatgca tggattctgt tccctacaca gaatgggagc tgtcagttat cattcaggac 1980
aaaggcaatc ctcagctaca taccaaagtc cttctgaagt gcatgatctt tgaatatgca 2040
gagtcggtga caagtacagc aatgacttca gtaagccagg catccttgga tgtctccatg 2100
ataataatta tttccttagg agcaatttgt gcagtgttgc tggttattat ggtgctattt 2160
gcaactaggt gtaaccgcga gaagaaagac actagatcct ataactgcag ggtggccgaa 2220
tcaacttacc agcaccaccc aaaaaggcca tcccggcaga ttcacaaagg ggacatcaca 2280
ttggtgccta ccataaatgg cactctgccc atcagatctc atcacagatc gtctccatct 2340
tcactctcta ccttagaaaag agggcagatg ggcagccggc agagtcacaa cagtcaccag 2400
tcactcaaca gtttgggtgac aatctcatca aaccacgtgc cagagaattt ctcattagaa 2460
ctcaccacag ccactcctgc tgttgagcag gtctctcagc ttctttcaat gcttcaccag 2520
gggcaatatc agccaagacc aagttttcga ggaaacaaat attccaggag ctacagatat 2580
gcccttcaag acatggacaa atttagcttg aaagacagtg gccgtggtga cagtgaggca 2640
ggagacagtg attatgattt ggggcgagat tctccaatag ataggctgct ggggtgaagga 2700
ttcagcgacc tgtttctcac agatggaaga attccagcag ctatgagact ctgcacggag 2760
gagtgcaggg tcctgggaca ctctgaccag tgctggatgc caccactgcc ctcaccgtct 2820
tctgattata ggagtaacat gttcattcca ggggaagaat tcccaacgca accccagcag 2880
cagcatccac atcagagtct tgaggatgac gctcagcctg cagattccgg tgaaaagaag 2940
aagagttttt ccacttttgg aaaggactcc ccaaacgatg aggacactgg ggataccagc 3000
acatcatctc tgctctcgga aatgagcagt gtgttccagc gtctcttacc gccttcctg 3060
gacacctatt ctgaatgcag tgagggtggat cgggtccaact ccctggagcg cagggaaggga 3120
cccttgccag ccaaaactgt gggttaccca cagggggtag cggcatgggc agccagtacg 3180
cattttcaaa atcccaccac caactgtggg ccgccacttg gaactcactc cagtgtgcag 3240
ccttcttcaa aatggctgcc agccatggag gagatccctg aaaattatga ggaagatgat 3300
tttgacaatg tgctcaacca cctcaatgat gggaaacacg aactcatgga tgccagtga 3360
ctggtggcag agattaacaa actgcttcaa gatgtccgcc agagc 3405

```

```

<210> 3
<211> 911
<212> PRT
<213> Homo sapiens

```

```

<400> 3
Met His Gln Met Asn Ala Lys Met His Phe Arg Phe Val Phe Ala Leu
1          5          10          15
Leu Ile Val Ser Phe Asn His Asp Val Leu Gly Lys Asn Leu Lys Tyr
20          25          30

```


Arg	Ile	Tyr	Glu	Glu	Gln	Arg	Val	Gly	Ser	Val	Ile	Ala	Arg	Leu	Ser
		35					40					45			
Glu	Asp	Val	Ala	Asp	Val	Leu	Leu	Lys	Leu	Pro	Asn	Pro	Ser	Thr	Val
	50					55					60				
Arg	Phe	Arg	Ala	Met	Gln	Arg	Gly	Asn	Ser	Pro	Leu	Leu	Val	Val	Asn
65					70					75					80
Glu	Asp	Asn	Gly	Glu	Ile	Ser	Ile	Gly	Ala	Thr	Ile	Asp	Arg	Glu	Gln
			85					90						95	
Thr	Leu	Pro	Thr	Glu	His	Leu	Gln	Leu	Phe	His	Ile	Glu	Val	Glu	Val
			100					105					110		
Leu	Asp	Ile	Asn	Asp	Asn	Ser	Pro	Gln	Phe	Ser	Arg	Ser	Leu	Ile	Pro
	115						120					125			
Ile	Glu	Ile	Ser	Glu	Ser	Ala	Ala	Val	Gly	Thr	Arg	Ile	Pro	Leu	Asp
	130					135					140				
Ser	Ala	Phe	Asp	Pro	Asp	Val	Gly	Glu	Asn	Ser	Leu	His	Thr	Tyr	Ser
145					150					155					160
Leu	Ser	Ala	Asn	Asp	Phe	Phe	Asn	Ile	Glu	Val	Arg	Thr	Arg	Thr	Asp
			165						170						175
Glu	Leu	Lys	Ser	Ser	Tyr	Glu	Leu	Gln	Leu	Thr	Ala	Ser	Asp	Met	Gly
		180						185					190		
Val	Pro	Gln	Arg	Ser	Gly	Ser	Ser	Ile	Leu	Lys	Ile	Ser	Ile	Ser	Asp
		195					200					205			
Ser	Asn	Asp	Asn	Ser	Pro	Ala	Phe	Glu	Gln	Gln	Ser	Tyr	Ile	Ile	Gln
	210					215					220				
Leu	Leu	Glu	Asn	Ser	Pro	Val	Gly	Thr	Leu	Leu	Leu	Asp	Leu	Asn	Ala
225					230						235				240
Thr	Asp	Pro	Asp	Glu	Gly	Ala	Asn	Gly	Lys	Ile	Val	Tyr	Ser	Phe	Ser
			245					250						255	
Ser	His	Val	Ser	Pro	Lys	Ile	Met	Glu	Thr	Phe	Lys	Ile	Asp	Ser	Glu
		260						265					270		
Lys	Ser	Tyr	Glu	Ile	Asp	Val	Gln	Ala	Gln	Asp	Leu	Gly	Pro	Asn	Ser
		275					280					285			
Ile	Pro	Ala	His	Cys	Lys	Ile	Ile	Ile	Lys	Val	Val	Asp	Val	Asn	Asp
	290					295					300				
Asn	Lys	Pro	Glu	Ile	Asn	Ile	Asn	Leu	Met	Ser	Pro	Gly	Lys	Glu	Glu
305					310					315					320
Ile	Ser	Tyr	Ile	Phe	Glu	Gly	Asp	Pro	Ile	Asp	Thr	Phe	Val	Ala	Leu
			325						330					335	
Val	Arg	Val	Gln	Asp	Lys	Asp	Ser	Gly	Leu	Asn	Gly	Glu	Ile	Val	Cys
			340					345					350		
Asn	Asn	Tyr	Leu	Ile	Leu	Thr	Asn	Ala	Thr	Leu	Asp	Arg	Glu	Lys	Arg
		355					360					365			
Ser	Glu	Tyr	Ser	Leu	Thr	Val	Ile	Ala	Glu	Asp	Arg	Gly	Thr	Pro	Ser
	370					375					380				
Leu	Ser	Thr	Val	Lys	His	Phe	Thr	Val	Gln	Ile	Asn	Asp	Ile	Asn	Asp
385					390					395					400
Asn	Pro	Pro	His	Phe	Gln	Arg	Ser	Arg	Tyr	Glu	Phe	Val	Ile	Ser	Glu
			405						410					415	
Asn	Asn	Ser	Pro	Gly	Ala	Tyr	Ile	Thr	Thr	Val	Thr	Ala	Thr	Asp	Pro
			420					425					430		
Phe	Ile	Leu	Gly	Ser	Ser	Ile	Thr	Thr	Tyr	Val	Thr	Ile	Asp	Pro	Ser
	435						440					445			
Asn	Gly	Ala	Ile	Tyr	Ala	Leu	Arg	Ile	Phe	Asp	His	Glu	Glu	Val	Ser
	450					455					460				
Gln	Ile	Thr	Phe	Val	Val	Glu	Ala	Arg	Asp	Gly	Gly	Ser	Pro	Lys	Gln
465					470					475					480
Leu	Val	Ser	Asn	Thr	Thr	Val	Val	Leu	Thr	Ile	Ile	Asp	Glu	Asn	Asp

<212> PRT
 <213> Homo sapiens

<400> 4
 Met His Gln Met Asn Ala Lys Met His Phe Arg Phe Val Phe Ala Leu
 1 5 10 15
 Leu Ile Val Ser Phe Asn His Asp Val Leu Gly
 20 25

<210> 5
 <211> 1108
 <212> PRT
 <213> Homo sapiens

<400> 5
 Lys Asn Leu Lys Tyr Arg Ile Tyr Glu Glu Gln Arg Val Gly Ser Val
 1 5 10 15
 Ile Ala Arg Leu Ser Glu Asp Val Ala Asp Val Leu Leu Lys Leu Pro
 20 25 30
 Asn Pro Ser Thr Val Arg Phe Arg Ala Met Gln Arg Gly Asn Ser Pro
 35 40 45
 Leu Leu Val Val Asn Glu Asp Asn Gly Glu Ile Ser Ile Gly Ala Thr
 50 55 60
 Ile Asp Arg Glu Gln Leu Cys Gln Lys Asn Leu Asn Cys Ser Ile Glu
 65 70 75 80
 Phe Asp Val Ile Thr Leu Pro Thr Glu His Leu Gln Leu Phe His Ile
 85 90 95
 Glu Val Glu Val Leu Asp Ile Asn Asp Asn Ser Pro Gln Phe Ser Arg
 100 105 110
 Ser Leu Ile Pro Ile Glu Ile Ser Glu Ser Ala Ala Val Gly Thr Arg
 115 120 125
 Ile Pro Leu Asp Ser Ala Phe Asp Pro Asp Val Gly Glu Asn Ser Leu
 130 135 140
 His Thr Tyr Ser Leu Ser Ala Asn Asp Phe Phe Asn Ile Glu Val Arg
 145 150 155 160
 Thr Arg Thr Asp Gly Ala Lys Tyr Ala Glu Leu Ile Val Val Arg Glu
 165 170 175
 Leu Asp Arg Glu Leu Lys Ser Ser Tyr Glu Leu Gln Leu Thr Ala Ser
 180 185 190
 Asp Met Gly Val Pro Gln Arg Ser Gly Ser Ser Ile Leu Lys Ile Ser
 195 200 205
 Ile Ser Asp Ser Asn Asp Asn Ser Pro Ala Phe Glu Gln Gln Ser Tyr
 210 215 220
 Ile Ile Gln Leu Leu Glu Asn Ser Pro Val Gly Thr Leu Leu Leu Asp
 225 230 235 240
 Leu Asn Ala Thr Asp Pro Asp Glu Gly Ala Asn Gly Lys Ile Val Tyr
 245 250 255
 Ser Phe Ser Ser His Val Ser Pro Lys Ile Met Glu Thr Phe Lys Ile
 260 265 270
 Asp Ser Glu Arg Gly His Leu Thr Leu Phe Lys Gln Val Asp Tyr Glu
 275 280 285
 Ile Thr Lys Ser Tyr Glu Ile Asp Val Gln Ala Gln Asp Leu Gly Pro
 290 295 300
 Asn Ser Ile Pro Ala His Cys Lys Ile Ile Ile Lys Val Val Asp Val
 305 310 315 320

Asn	Asp	Asn	Lys	Pro	Glu	Ile	Asn	Ile	Asn	Leu	Met	Ser	Pro	Gly	Lys
				325					330					335	
Glu	Glu	Ile	Ser	Tyr	Ile	Phe	Glu	Gly	Asp	Pro	Ile	Asp	Thr	Phe	Val
			340					345					350		
Ala	Leu	Val	Arg	Val	Gln	Asp	Lys	Asp	Ser	Gly	Leu	Asn	Gly	Glu	Ile
		355					360					365			
Val	Cys	Lys	Leu	His	Gly	His	Gly	His	Phe	Lys	Leu	Gln	Lys	Thr	Tyr
	370				375						380				
Glu	Asn	Asn	Tyr	Leu	Ile	Leu	Thr	Asn	Ala	Thr	Leu	Asp	Arg	Glu	Lys
385					390					395					400
Arg	Ser	Glu	Tyr	Ser	Leu	Thr	Val	Ile	Ala	Glu	Asp	Arg	Gly	Thr	Pro
				405					410					415	
Ser	Leu	Ser	Thr	Val	Lys	His	Phe	Thr	Val	Gln	Ile	Asn	Asp	Ile	Asn
			420					425					430		
Asp	Asn	Pro	Pro	His	Phe	Gln	Arg	Ser	Arg	Tyr	Glu	Phe	Val	Ile	Ser
		435					440					445			
Glu	Asn	Asn	Ser	Pro	Gly	Ala	Tyr	Ile	Thr	Thr	Val	Thr	Ala	Thr	Asp
	450					455					460				
Pro	Asp	Leu	Gly	Glu	Asn	Gly	Gln	Val	Thr	Tyr	Thr	Ile	Leu	Glu	Ser
465					470					475					480
Phe	Ile	Leu	Gly	Ser	Ser	Ile	Thr	Thr	Tyr	Val	Thr	Ile	Asp	Pro	Ser
				485					490					495	
Asn	Gly	Ala	Ile	Tyr	Ala	Leu	Arg	Ile	Phe	Asp	His	Glu	Glu	Val	Ser
			500					505					510		
Gln	Ile	Thr	Phe	Val	Val	Glu	Ala	Arg	Asp	Gly	Gly	Ser	Pro	Lys	Gln
		515					520					525			
Leu	Val	Ser	Asn	Thr	Thr	Val	Val	Leu	Thr	Ile	Ile	Asp	Glu	Asn	Asp
	530					535					540				
Asn	Val	Pro	Val	Val	Ile	Gly	Pro	Ala	Leu	Arg	Asn	Asn	Thr	Ala	Glu
545					550					555					560
Ile	Thr	Ile	Pro	Lys	Gly	Ala	Glu	Ser	Gly	Phe	His	Val	Thr	Arg	Ile
				565					570					575	
Arg	Ala	Ile	Asp	Arg	Asp	Ser	Gly	Val	Asn	Ala	Glu	Leu	Ser	Cys	Ala
			580				585						590		
Ile	Val	Ala	Gly	Asn	Glu	Glu	Asn	Ile	Phe	Ile	Ile	Asp	Pro	Arg	Ser
		595					600					605			
Cys	Asp	Ile	His	Thr	Asn	Val	Ser	Met	Asp	Ser	Val	Pro	Tyr	Thr	Glu
	610				615						620				
Trp	Glu	Leu	Ser	Val	Ile	Gln	Asp	Lys	Gly	Asn	Pro	Gln	Leu	His	
625					630				635					640	
Thr	Lys	Val	Leu	Leu	Lys	Cys	Met	Ile	Phe	Glu	Tyr	Ala	Glu	Ser	Val
			645						650					655	
Thr	Ser	Thr	Ala	Met	Thr	Ser	Val	Ser	Gln	Ala	Ser	Leu	Asp	Val	Ser
			660					665					670		
Met	Ile	Ile	Ile	Ile	Ser	Leu	Gly	Ala	Ile	Cys	Ala	Val	Leu	Leu	Val
	675						680					685			
Ile	Met	Val	Leu	Phe	Ala	Thr	Arg	Cys	Asn	Arg	Glu	Lys	Lys	Asp	Thr
	690					695					700				
Arg	Ser	Tyr	Asn	Cys	Arg	Val	Ala	Glu	Ser	Thr	Tyr	Gln	His	His	Pro
705				710						715					720
Lys	Arg	Pro	Ser	Arg	Gln	Ile	His	Lys	Gly	Asp	Ile	Thr	Leu	Val	Pro
				725					730					735	
Thr	Ile	Asn	Gly	Thr	Leu	Pro	Ile	Arg	Ser	His	His	Arg	Ser	Ser	Pro
		740					745						750		
Ser	Ser	Ser	Pro	Thr	Leu	Glu	Arg	Gly	Gln	Met	Gly	Ser	Arg	Gln	Ser
		755					760					765			
His	Asn	Ser	His	Gln	Ser	Leu	Asn	Ser	Leu	Val	Thr	Ile	Ser	Ser	Asn

770		775		780
His Val Pro Glu Asn Phe Ser Leu Glu Leu Thr His Ala Thr Pro Ala				
785		790		795
Val Glu Gln Val Ser Gln Leu Leu Ser Met Leu His Gln Gly Gln Tyr				800
		805		810
Gln Pro Arg Pro Ser Phe Arg Gly Asn Lys Tyr Ser Arg Ser Tyr Arg				815
		820		825
Tyr Ala Leu Gln Asp Met Asp Lys Phe Ser Leu Lys Asp Ser Gly Arg				830
		835		840
Gly Asp Ser Glu Ala Gly Asp Ser Asp Tyr Asp Leu Gly Arg Asp Ser				845
		850		855
Pro Ile Asp Arg Leu Leu Gly Glu Gly Phe Ser Asp Leu Phe Leu Thr				860
		865		870
Asp Gly Arg Ile Pro Ala Ala Met Arg Leu Cys Thr Glu Glu Cys Arg				875
		885		890
Val Leu Gly His Ser Asp Gln Cys Trp Met Pro Pro Leu Pro Ser Pro				895
		900		905
Ser Ser Asp Tyr Arg Ser Asn Met Phe Ile Pro Gly Glu Glu Phe Pro				910
		915		920
Thr Gln Pro Gln Gln Gln His Pro His Gln Ser Leu Glu Asp Asp Ala				925
		930		935
Gln Pro Ala Asp Ser Gly Glu Lys Lys Lys Ser Phe Ser Thr Phe Gly				940
		945		950
Lys Asp Ser Pro Asn Asp Glu Asp Thr Gly Asp Thr Ser Thr Ser Ser				955
		965		970
Leu Leu Ser Glu Met Ser Ser Val Phe Gln Arg Leu Leu Pro Pro Ser				975
		980		985
Leu Asp Thr Tyr Ser Glu Cys Ser Glu Val Asp Arg Ser Asn Ser Leu				990
		995		1000
Glu Arg Arg Lys Gly Pro Leu Pro Ala Lys Thr Val Gly Tyr Pro Gln				1005
		1010		1015
Gly Val Ala Ala Trp Ala Ala Ser Thr His Phe Gln Asn Pro Thr Thr				1020
		1025		1030
Asn Cys Gly Pro Pro Leu Gly Thr His Ser Ser Val Gln Pro Ser Ser				1035
		1045		1050
Lys Trp Leu Pro Ala Met Glu Glu Ile Pro Glu Asn Tyr Glu Glu Asp				1055
		1060		1065
Asp Phe Asp Asn Val Leu Asn His Leu Asn Asp Gly Lys His Glu Leu				1070
		1075		1080
Met Asp Ala Ser Glu Leu Val Ala Glu Ile Asn Lys Leu Leu Gln Asp				1085
		1090		1095
Val Arg Gln Ser				1100
1105				

<210> 6
 <211> 673
 <212> PRT
 <213> Homo sapiens

<400> 6
 Lys Asn Leu Lys Tyr Arg Ile Tyr Glu Glu Gln Arg Val Gly Ser Val
 1 5 10 15
 Ile Ala Arg Leu Ser Glu Asp Val Ala Asp Val Leu Leu Lys Leu Pro
 20 25 30
 Asn Pro Ser Thr Val Arg Phe Arg Ala Met Gln Arg Gly Asn Ser Pro
 35 40 45

Leu	Leu	Val	Val	Asn	Glu	Asp	Asn	Gly	Glu	Ile	Ser	Ile	Gly	Ala	Thr
50						55					60				
Ile	Asp	Arg	Glu	Gln	Leu	Cys	Gln	Lys	Asn	Leu	Asn	Cys	Ser	Ile	Glu
65					70					75					80
Phe	Asp	Val	Ile	Thr	Leu	Pro	Thr	Glu	His	Leu	Gln	Leu	Phe	His	Ile
				85					90					95	
Glu	Val	Glu	Val	Leu	Asp	Ile	Asn	Asp	Asn	Ser	Pro	Gln	Phe	Ser	Arg
			100					105					110		
Ser	Leu	Ile	Pro	Ile	Glu	Ile	Ser	Glu	Ser	Ala	Ala	Val	Gly	Thr	Arg
	115						120					125			
Ile	Pro	Leu	Asp	Ser	Ala	Phe	Asp	Pro	Asp	Val	Gly	Glu	Asn	Ser	Leu
	130					135					140				
His	Thr	Tyr	Ser	Leu	Ser	Ala	Asn	Asp	Phe	Phe	Asn	Ile	Glu	Val	Arg
145					150					155					160
Thr	Arg	Thr	Asp	Gly	Ala	Lys	Tyr	Ala	Glu	Leu	Ile	Val	Val	Arg	Glu
				165					170					175	
Leu	Asp	Arg	Glu	Leu	Lys	Ser	Ser	Tyr	Glu	Leu	Gln	Leu	Thr	Ala	Ser
			180					185					190		
Asp	Met	Gly	Val	Pro	Gln	Arg	Ser	Gly	Ser	Ser	Ile	Leu	Lys	Ile	Ser
	195						200					205			
Ile	Ser	Asp	Ser	Asn	Asp	Asn	Ser	Pro	Ala	Phe	Glu	Gln	Gln	Ser	Tyr
	210					215					220				
Ile	Ile	Gln	Leu	Leu	Glu	Asn	Ser	Pro	Val	Gly	Thr	Leu	Leu	Leu	Asp
225					230					235					240
Leu	Asn	Ala	Thr	Asp	Pro	Asp	Glu	Gly	Ala	Asn	Gly	Lys	Ile	Val	Tyr
				245					250					255	
Ser	Phe	Ser	Ser	His	Val	Ser	Pro	Lys	Ile	Met	Glu	Thr	Phe	Lys	Ile
			260					265					270		
Asp	Ser	Glu	Arg	Gly	His	Leu	Thr	Leu	Phe	Lys	Gln	Val	Asp	Tyr	Glu
		275					280					285			
Ile	Thr	Lys	Ser	Tyr	Glu	Ile	Asp	Val	Gln	Ala	Gln	Asp	Leu	Gly	Pro
	290					295					300				
Asn	Ser	Ile	Pro	Ala	His	Cys	Lys	Ile	Ile	Ile	Lys	Val	Val	Asp	Val
305					310					315					320
Asn	Asp	Asn	Lys	Pro	Glu	Ile	Asn	Ile	Asn	Leu	Met	Ser	Pro	Gly	Lys
				325					330					335	
Glu	Glu	Ile	Ser	Tyr	Ile	Phe	Glu	Gly	Asp	Pro	Ile	Asp	Thr	Phe	Val
			340					345					350		
Ala	Leu	Val	Arg	Val	Gln	Asp	Lys	Asp	Ser	Gly	Leu	Asn	Gly	Glu	Ile
		355					360					365			
Val	Cys	Lys	Leu	His	Gly	His	Gly	His	Phe	Lys	Leu	Gln	Lys	Thr	Tyr
	370					375					380				
Glu	Asn	Asn	Tyr	Leu	Ile	Leu	Thr	Asn	Ala	Thr	Leu	Asp	Arg	Glu	Lys
385					390					395					400
Arg	Ser	Glu	Tyr	Ser	Leu	Thr	Val	Ile	Ala	Glu	Asp	Arg	Gly	Thr	Pro
				405					410					415	
Ser	Leu	Ser	Thr	Val	Lys	His	Phe	Thr	Val	Gln	Ile	Asn	Asp	Ile	Asn
			420					425					430		
Asp	Asn	Pro	Pro	His	Phe	Gln	Arg	Ser	Arg	Tyr	Glu	Phe	Val	Ile	Ser
		435					440					445			
Glu	Asn	Asn	Ser	Pro	Gly	Ala	Tyr	Ile	Thr	Thr	Val	Thr	Ala	Thr	Asp
	450					455					460				
Pro	Asp	Leu	Gly	Glu	Asn	Gly	Gln	Val	Thr	Tyr	Thr	Ile	Leu	Glu	Ser
465					470					475					480
Phe	Ile	Leu	Gly	Ser	Ser	Ile	Thr	Thr	Tyr	Val	Thr	Ile	Asp	Pro	Ser
				485					490					495	
Asn	Gly	Ala	Ile	Tyr	Ala	Leu	Arg	Ile	Phe	Asp	His	Glu	Glu	Val	Ser

				500					505					510			
Gln	Ile	Thr	Phe	Val	Val	Glu	Ala	Arg	Asp	Gly	Gly	Ser	Pro	Lys	Gln		
		515					520					525					
Leu	Val	Ser	Asn	Thr	Thr	Val	Val	Leu	Thr	Ile	Ile	Asp	Glu	Asn	Asp		
		530				535					540						
Asn	Val	Pro	Val	Val	Ile	Gly	Pro	Ala	Leu	Arg	Asn	Asn	Thr	Ala	Glu		
545					550					555					560		
Ile	Thr	Ile	Pro	Lys	Gly	Ala	Glu	Ser	Gly	Phe	His	Val	Thr	Arg	Ile		
				565					570					575			
Arg	Ala	Ile	Asp	Arg	Asp	Ser	Gly	Val	Asn	Ala	Glu	Leu	Ser	Cys	Ala		
			580					585					590				
Ile	Val	Ala	Gly	Asn	Glu	Glu	Asn	Ile	Phe	Ile	Ile	Asp	Pro	Arg	Ser		
		595					600					605					
Cys	Asp	Ile	His	Thr	Asn	Val	Ser	Met	Asp	Ser	Val	Pro	Tyr	Thr	Glu		
	610				615						620						
Trp	Glu	Leu	Ser	Val	Ile	Ile	Gln	Asp	Lys	Gly	Asn	Pro	Gln	Leu	His		
625					630					635				640			
Thr	Lys	Val	Leu	Leu	Lys	Cys	Met	Ile	Phe	Glu	Tyr	Ala	Glu	Ser	Val		
			645					650					655				
Thr	Ser	Thr	Ala	Met	Thr	Ser	Val	Ser	Gln	Ala	Ser	Leu	Asp	Val	Ser		
			660					665					670				

Met

<210> 7
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 7
 Ile Ile Ile Ile Ser Leu Gly Ala Ile Cys Ala Val Leu Leu Val Ile
 1 5 10 15
 Met Val Leu Phe Ala
 20

<210> 8
 <211> 414
 <212> PRT
 <213> Homo sapiens

<400> 8
 Thr Arg Cys Asn Arg Glu Lys Lys Asp Thr Arg Ser Tyr Asn Cys Arg
 1 5 10 15
 Val Ala Glu Ser Thr Tyr Gln His His Pro Lys Arg Pro Ser Arg Gln
 20 25 30
 Ile His Lys Gly Asp Ile Thr Leu Val Pro Thr Ile Asn Gly Thr Leu
 35 40 45
 Pro Ile Arg Ser His His Arg Ser Ser Pro Ser Ser Ser Pro Thr Leu
 50 55 60
 Glu Arg Gly Gln Met Gly Ser Arg Gln Ser His Asn Ser His Gln Ser
 65 70 75 80
 Leu Asn Ser Leu Val Thr Ile Ser Ser Asn His Val Pro Glu Asn Phe
 85 90 95
 Ser Leu Glu Leu Thr His Ala Thr Pro Ala Val Glu Gln Val Ser Gln
 100 105 110

Leu	Leu	Ser	Met	Leu	His	Gln	Gly	Gln	Tyr	Gln	Pro	Arg	Pro	Ser	Phe
		115					120					125			
Arg	Gly	Asn	Lys	Tyr	Ser	Arg	Ser	Tyr	Arg	Tyr	Ala	Leu	Gln	Asp	Met
	130					135					140				
Asp	Lys	Phe	Ser	Leu	Lys	Asp	Ser	Gly	Arg	Gly	Asp	Ser	Glu	Ala	Gly
145					150					155					160
Asp	Ser	Asp	Tyr	Asp	Leu	Gly	Arg	Asp	Ser	Pro	Ile	Asp	Arg	Leu	Leu
			165					170						175	
Gly	Glu	Gly	Phe	Ser	Asp	Leu	Phe	Leu	Thr	Asp	Gly	Arg	Ile	Pro	Ala
			180					185					190		
Ala	Met	Arg	Leu	Cys	Thr	Glu	Glu	Cys	Arg	Val	Leu	Gly	His	Ser	Asp
	195						200					205			
Gln	Cys	Trp	Met	Pro	Pro	Leu	Pro	Ser	Pro	Ser	Ser	Asp	Tyr	Arg	Ser
	210					215					220				
Asn	Met	Phe	Ile	Pro	Gly	Glu	Glu	Phe	Pro	Thr	Gln	Pro	Gln	Gln	Gln
225					230					235					240
His	Pro	His	Gln	Ser	Leu	Glu	Asp	Asp	Ala	Gln	Pro	Ala	Asp	Ser	Gly
			245					250						255	
Glu	Lys	Lys	Lys	Ser	Phe	Ser	Thr	Phe	Gly	Lys	Asp	Ser	Pro	Asn	Asp
			260					265					270		
Glu	Asp	Thr	Gly	Asp	Thr	Ser	Thr	Ser	Ser	Leu	Leu	Ser	Glu	Met	Ser
		275					280					285			
Ser	Val	Phe	Gln	Arg	Leu	Leu	Pro	Pro	Ser	Leu	Asp	Thr	Tyr	Ser	Glu
	290				295						300				
Cys	Ser	Glu	Val	Asp	Arg	Ser	Asn	Ser	Leu	Glu	Arg	Arg	Lys	Gly	Pro
305					310					315					320
Leu	Pro	Ala	Lys	Thr	Val	Gly	Tyr	Pro	Gln	Gly	Val	Ala	Ala	Trp	Ala
			325						330					335	
Ala	Ser	Thr	His	Phe	Gln	Asn	Pro	Thr	Thr	Asn	Cys	Gly	Pro	Pro	Leu
			340					345					350		
Gly	Thr	His	Ser	Ser	Val	Gln	Pro	Ser	Ser	Lys	Trp	Leu	Pro	Ala	Met
		355					360					365			
Glu	Glu	Ile	Pro	Glu	Asn	Tyr	Glu	Glu	Asp	Asp	Phe	Asp	Asn	Val	Leu
	370				375						380				
Asn	His	Leu	Asn	Asp	Gly	Lys	His	Glu	Leu	Met	Asp	Ala	Ser	Glu	Leu
385					390					395					400
Val	Ala	Glu	Ile	Asn	Lys	Leu	Leu	Gln	Asp	Val	Arg	Gln	Ser		
			405					410							

<210> 9

<220>

<223> Unknown

<400> 9

000

<210> 10

<220>

<223> Unknown

<400> 10

000

<210> 11

<220>
<223> Unknown

<400> 11
000

<210> 12

<220>
<223> Unknown

<400> 12
000

<210> 13

<220>
<223> Unknown

<400> 13
000

<210> 14

<220>
<223> Unknown

<400> 14
000

<210> 15

<220>
<223> Unknown

<400> 15
000

<210> 16

<220>
<223> Unknown

<400> 16
000

<210> 17

<220>
<223> Unknown

<400> 17
000

<210> 18

<220>
<223> Unknown

<400> 18
000

<210> 19

<220>
<223> Unknown

<400> 19
000

<210> 20

<220>
<223> Unknown

<400> 20
000

<210> 21

<220>
<223> Unknown

<400> 21
000

<210> 22

<220>
<223> Unknown

<400> 22
000

<210> 23

<220>
<223> Unknown

<400> 23
000

<210> 24

<220>
<223> Unknown

<400> 24
000

<210> 25

<220>
<223> Unknown

<400> 25
000

<210> 26

<220>
<223> Unknown

<400> 26
000

<210> 27

<220>
<223> Unknown

<400> 27
000

<210> 28

<220>
<223> Unknown

<400> 28
000

<210> 29

<220>
<223> Unknown

<400> 29
000

<210> 30

<220>
<223> Unknown

<400> 30
000

<210> 31
<211> 5118
<212> DNA
<213> Homo sapiens

<400> 31
gttttagtctg cagccgagca gctaaaggga gaaagaatcg ctcaggaaag acacactgca 60
gactccaccg gcaccctgca atagatgggt tccgactaca caagggagaa aacgcggagg 120
tgacactctc ctgcctggaa agaggacgaa cgaccaaaca aacgcaagga ctggactcca 180
tgccgaaggt atctggaagt cgtgacacgg tgtgtataaa acaaaagttt gcgagctgtt 240
aattgctgtg ctgtgttatt aagagacgct ttcaagtttc aagtaccaa tgtagcttta 300

cgttgccaaa	ggaagttgag	gcaattgctt	tgctgtttta	acttgctctg	tgagggaaaat	360
ctcataaact	gaccaatgca	ccaaatgaat	gctaaaatgc	acttttaggtt	tgttttttgca	420
cttctgatag	tatctttcaa	ccacgatgta	ctgggcaaga	atttgaaata	caggattttat	480
gaggaacaga	gggttggatc	agtaattgca	agactatcag	aggatgtggc	tgatgtttta	540
ttgaagcttc	ctaatacctt	tactgttcga	tttcgagcca	tgcagagggg	aaattctcct	600
ctacttgtag	taaacgagga	taatggggaa	atcagcatag	gggctacaat	tgaccgtgaa	660
caactgtgcc	agaaaaactt	gaactgttcc	atagagtttg	atgtgatcac	tctaccacca	720
gagcatctgc	agctttttcca	tattgaagtt	gaagtgtctg	atattaatga	caattctccc	780
cagttttcaa	gatctctcat	acctattgag	atatctgaga	gtgcagcagt	tgggactcgc	840
attccccctg	acagtgcatt	tgatccagat	gttggggaaa	attccctcca	cacatactcg	900
ctctctgcc	atgatttttt	taatatcgag	gttcggacca	ggactgatgg	agccaagtat	960
gcagaactca	tagtggtcag	agagtttagt	cgggagctga	agtcaagcta	cgagcttcag	1020
ctcactgcct	cagacatggg	agtacctcag	aggtctggct	catccatact	aaaaataaag	1080
atttcagact	ccaatgacaa	cagccctgct	tttgagcagc	aatctttatat	aatacaactc	1140
ttagaaaact	ccccggttgg	cacttttgctc	ttagatctga	atgccacgga	tccagatgag	1200
ggcgctaatt	ggaaaattgt	atattccttc	agcagtcatg	tgtctcccaa	aattatggag	1260
acttttaaaa	ttgattctga	aagaggacat	ttgactcttt	tcaagcaagt	ggattatgaa	1320
atcaccaaat	cctatgagat	tgatgttcag	gctcaagatt	tgggtccaaa	ttcaatccca	1380
gcccattgca	aaattataat	taaggttgtg	gatgttaatg	acaataaacc	tgaaattaac	1440
atcaacctca	tgtccccctg	aaaagaagaa	atatcttata	tttttgaagg	ggatcctatt	1500
gatacatttg	ttgctttggg	cagagttcag	gacaaggatt	ctgggctgaa	tggagaaata	1560
gtttgttaagc	ttcatgggca	tggtcacttt	aaacttcaga	agacatatga	aaacaattat	1620
ttaatcttaa	ctaatagccac	actggataga	gaaaagagat	ctgagtatag	tttgactgta	1680
atcgctgagg	acaggggggac	acccagtctc	tctacagtga	aacatttttac	agttcaaatac	1740
aatgatataca	atgacaatcc	acccacttcc	cagagaagcc	gatatgaatt	tgtaatttca	1800
gaaaataact	caccaggggc	atatatcacc	actgttacag	ccacagatcc	tgatcttgga	1860
gaaaatgggc	aagtgcacata	caccatcctg	gagagtttta	ttctaggaag	ttccataact	1920
acatatgtaa	ccattgaccc	atctaattgga	gccatctatg	ccctcagaat	ctttgatcat	1980
gaagaagtga	gtcagatcac	ttttgtggta	gaagcaagag	atggaggaag	cccgaagcaa	2040
ctggtaagca	ataccacagt	tgtgtctcacc	atcatgtacg	aaaatgacaa	cgttcctgtg	2100
gttatagggc	ctgcattgcg	taataatacg	gcagaaatca	ccattcccaa	aggggctgaa	2160
agtggctttc	atgtcacaa	aataaggggca	attgacagag	actctgggtg	gaatgctgaa	2220
ctcagctgcg	ccatagtagc	aggtaatgag	gagaatatct	tcataattga	tccacgatca	2280
tgtgacatcc	ataccaacgt	tagcatggat	tctgttccct	acacagaatg	ggagctgtca	2340
gttatcatcc	aggacaaagg	caatcctcag	ctacatacca	aagtccttct	gaagtgcattg	2400
atctttgaat	atgcagagtc	ggtgacaagt	acagcaatga	cttcagtaag	ccaggcatcc	2460
ttggatgtct	ccatgataat	aattatttcc	ttaggagcaa	tttgtgcagt	gttgctgggt	2520
attatggtgc	tatttgcaac	taggtgtaac	cgcgagaaga	aagacactag	atcctataac	2580
tgcaggggtg	ccgaatcaac	ttaccagcac	caccgaaaaa	ggccatcccg	gcagattcac	2640
aaaggggaca	tcacatttgg	gcctaccata	aatggcactc	tgcccatcag	atctcatcac	2700
agatcgtctc	catcttcatc	tcctacctta	gaaagagggc	agatgggcag	ccggcagagt	2760
cacaacagtc	accagtcact	caacagtttg	gtgacaatct	catcaaacca	cggtgccagag	2820
aattttctcat	tagaactcac	ccacgccact	cctgctgttg	aggtctctca	gcttctttca	2880
atgcttcacc	aggggcaata	tcagccaaga	ccaagttttc	gaggaaacaa	atattccagg	2940
agctacagat	atgcccttca	agacatggac	aaatttagct	tgaaagacag	tggccgtggg	3000
gacagtgagg	caggagacag	tgattatgat	ttggggcgag	attctccaat	agataggctg	3060
ctgggtgaag	gattcagcga	cctgtttctc	acagatggaa	gaattccagc	agctatgaga	3120
ctctgcacgg	aggagtgcag	ggtcctggga	cactctgacc	agtgtgggag	gccaccactg	3180
ccctcaccgt	cttctgatta	taggagtaac	atgttcattc	caggggaaga	attcccaacg	3240
caaccccagc	agcagcatcc	acatcagagt	cttgaggatg	acgctcagcc	tgcagattcc	3300
ggtgaaaaga	agaagagttt	ttccaccttt	ggaaaggact	ccccaaacga	tgaggacact	3360
ggggatacca	gcacatcatc	tctgctctcg	gaaatgagca	gtgtgttcca	gcgtctctta	3420
ccgccttccc	tggacacctt	ttctgaatgc	agtgaggtgg	atcgggtccaa	ctccctggag	3480
cgcaggaagg	gacccttgcc	agccaaaact	gtgggttacc	cacagggggg	agcggcatgg	3540
gcagccagta	cgcatttttca	aaatcccacc	accaactgtg	ggccgccact	tggaactcac	3600
tccagtgtgc	agccttcttc	aaaatggctg	ccagccatgg	aggagatccc	tgaaaattat	3660
gaggaagatg	attttgacaa	tgtgtctaac	cacctcaatg	atgggaaaca	cgaactcatg	3720

gatgccagtg	aactgggtggc	agagattaac	aaactgcttc	aagatgtccg	ccagagctag	3780
gagatttttag	cgaagcattt	ttgtttccat	gtatatggaa	ataggggaaca	acaacaacaa	3840
caaaaaaccc	tgaagaact	ggcattgcc	aatagttgca	tttatcataa	atgtgtctgt	3900
gtatattgaa	tattaaatac	tgtattttcg	tatgtacaca	atgcaagtgt	gattatttta	3960
atctgtattt	taaaaataca	tttgtacctt	atatttatgt	gtaatttaac	aaacaaattt	4020
tatttttttta	ctcccatgac	agacatgttt	ttcctagtcg	tgtagaaact	agccactgtt	4080
caaactctgat	acactattca	accacaaagt	gtaaaggcac	tgcttagatt	agttttgttg	4140
gggaagaatt	attatgttgt	atgaacaacc	ccactgaagc	attatacaat	tcttaattcc	4200
attaagtgat	cccacttttt	ttcaataact	ttttagaaat	taagaatcat	taaaattgtt	4260
aagctatttt	attgtttattt	tctctacttt	ctactagccc	caatagttga	actccttatag	4320
gaaaatcgaa	agataaagt	aaagtttatt	tcaggactga	gaaatatctt	gaaggttatt	4380
tatttagatga	ctatctcaaa	tgaacttttt	atagacaatg	atgaaaacag	aactaaagtc	4440
aatgtttcct	gactcccagg	cccctactat	tccaggccat	cacactggcc	tgttccggag	4500
aatattttctc	tcacaatatt	attatctact	tataattatg	gtaaacaata	aattttattc	4560
catccttgta	gtatgaaaca	tgctccaagg	aaatggaatc	tgctctttaa	atggataaca	4620
gtatgtgttc	taatggcata	aaatattact	ggataaaaac	agttgtgtca	gtgtctctcc	4680
taaggtagta	aatataattg	acttattctg	aacccttctt	atgttgatc	ttccctttcc	4740
tctcacataa	cttgaacatt	ttaatctttt	ggaatattgt	ctttctttgt	tataactatt	4800
catttttagc	ttttgtctcc	agtgcattgt	ctcatatttt	tgcttttatt	tttagtataa	4860
gaacatttat	aaaatcatat	ttttgttact	gcaattgttt	tatttggtgt	gtggcaaagt	4920
agaaatcctt	tatttattgt	gctgtgatct	ctctgtgtgg	aatgccttgg	tgagagagat	4980
gcttattatg	actattatca	ttcttgacca	agcttctatt	aatgttattt	ctaataatac	5040
actatcttga	ttgtactctc	cagaaaattt	ttctgtcagt	gaaaataaaa	gaaaaattaa	5100
agtaaaaaaa	aaaaaaaa					5118

<210> 32
 <211> 3402
 <212> DNA
 <213> Homo sapiens

<400> 32						
atgcaccaa	tgaatgctaa	aatgcacttt	aggtttgttt	ttgcacttct	gatagtatct	60
ttcaaccacg	atgtactggg	caagaatttg	aaatacagga	tttatgagga	acagagggtt	120
ggatcagtaa	ttgcaagact	atcagaggat	gtggctgatg	ttttattgaa	gcttccta	180
ccttctactg	ttcgatttcg	agccatgcag	aggggaaatt	ctcctctact	tgtagtaaac	240
gaggataatg	gggaaatcag	cataggggct	acaattgacc	gtgaacaact	gtgccagaaa	300
aaactgaact	gttccataga	gtttgatgtg	atcactctac	ccacagagca	tctgcagctt	360
ttccatattg	aagttgaagt	gctggatatt	aatgacaatt	ctccccagtt	ttcaagatct	420
ctcatacct	ttgagatata	tgagagtgc	gcagttggga	ctcgcatctc	cctggacagt	480
gcattttgat	cagatgttgg	ggaaaattcc	ctccacacat	actcgctctc	tgccaatgat	540
ttttttaata	tcgagggttcg	gaccaggact	gatggagcca	agtatgcaga	actcatagt	600
gtcagagagt	tagatcggga	gctgaagtca	agctacgagc	ttcagctcac	tgccctcag	660
atgggagtag	ctcagagggtc	tggtctcatcc	atactaaaaa	taagcatttc	agactccaat	720
gacaacagcc	ctgcttttga	gcagcaatct	tataataac	aactcttaga	aaactccccg	780
gttggcactt	tgctcttaga	tctgaatgcc	acggatccag	atgagggcgc	taatgggaaa	840
attgtatat	ccttcagcag	tcatgtgtct	cccaaaatta	tggagacttt	taaaattgat	900
tctgaaagag	gacatttgac	tcttttcaag	caagtggatt	atgaaatcac	caaactcctat	960
gagattgatg	ttcaggctca	agatttgggt	ccaaattcaa	tcccagccca	ttgcaaaatt	1020
ataattaagg	ttgtggatgt	taatgacaat	aaacctgaaa	ttaacatcaa	cctcatgtcc	1080
cctggaaaag	aagaaatatc	ttatattttt	gaaggggatc	ctattgatac	atttgttgct	1140
ttggctcagag	ttcaggacaa	ggattctggg	ctgaatggag	aaatagtttg	taagcttcat	1200
ggacatggtc	actttaaaact	tcagaagaca	tatgaaaaca	attattttaat	cttaactaat	1260
gccacactgg	atagagaaaa	gagatctgag	tatagtttga	ctgtaatcgc	tgaggacagg	1320
gggacaccca	gtctctctac	agtgaacat	tttacagttc	aatcaatga	tatcaatgac	1380
aatccacccc	acttccagag	aagccgatat	gaatttgtaa	tttcagaaaa	taactcacca	1440

```

ggggcatata tcaccactgt tacagccaca gatcctgate ttggagaaaa tgggcaagtg 1500
acatacacca tcttggagag ttttattcta ggaagttcca taactacata tgtaaccatt 1560
gacccatcta atggagccat ctatgccctc agaatccttg atcatgaaga agtgagtcag 1620
atcacttttg tggtagaagc aagagatgga ggaagcccga agcaactggt aagcaatacc 1680
acagtgtgtc tcaccatcat tgacgaaaat gacaacgttc ctgtggttat agggcctgca 1740
ttgcgtaata atacggcaga aatcaccatt cccaaagggg ctgaaagtgg ctttcatgtc 1800
acaagaataa gggcaattga cagagactct ggtgtgaatg ctgaactcag ctgcgccata 1860
gtagcaggta atgaggagaa tatcttcata attgatccac gatcatgtga catccatacc 1920
aacgttagca tggattctgt tccctacaca gaatgggagc tgtcagttat cattcaggac 1980
aaaggcaatc ctcagctaca taccaaagtc cttctgaagt gcatgatctt tgaatatgca 2040
gagtcgggtg caagtacagc aatgacttca gtaagccagg catccttggg tgtctccatg 2100
ataataatta tttccttagg agcaatttgt gcagtgttgc tggttattat ggtgctattt 2160
gcaactaggt gtaaccgcga gaagaaagac actagatcct ataactgcag ggtggccgaa 2220
tcaacttacc agcaccaccc aaaaaggcca tcccggcaga ttcacaaagg ggacatcaca 2280
ttggtgccta ccataaatgg cactctgccc atcagatctc atcacagatc gtctccatct 2340
tcactccta ccttagaaag agggcagatg ggcagccggc agagtcacaa cagtcaccag 2400
tcactcaaca gtttgggtgac aatctcatca aaccacgtgc cagagaattt ctcattagaa 2460
ctcaccacag ccactcctgc tgttgaggtc tctcagcttc tttcaatgct tcaccagggg 2520
caatatcagc caagaccaag ttttcgagga aacaaatatt ccaggagcta cagatatgcc 2580
cttcaagaca tggacaaatt tagcttgaaa gacagtggcc gtggtgacag tgaggcagga 2640
gacagtgatt atgatttggg gcgagattct ccaatagata ggctgctggg tgaaggattc 2700
agcgacctgt ttctcacaga tggagaatt ccagcagcta tgagactctg cacgaggag 2760
tgcagggtcc tgggacactc tgaccagtgc tggatgccac cactgccctc accgtcttct 2820
gattatagga gtaacatgtt cattccaggg gaagaattcc caacgcaacc ccagcagcag 2880
catccacatc agagtcttga ggatgacgct cagcctgcag attccggtga aaagaagaag 2940
agtttttcca cctttggaag ggactcccca aacgatgagg aactgggga taccagcaca 3000
tcactctctg tctcggaaat gagcagtgtg ttccagcgtc tcttaccgcc ttccctggac 3060
acctattctg aatgcagtga ggtggatcgg tccaactccc tggagcgcag gaagggaccc 3120
ttgccagcca aaactgtggg ttaccacagc ggggtagcgg catgggcagc cagtacgcat 3180
tttcaaaatc ccaccacca ctgtgggccg ccacttgga ctcactccag tgtgcagcct 3240
tcttcaaaat ggctgccagc catggaggag atccctgaaa attatgagga agatgatttt 3300
gacaatgtgc tcaaccacct caatgatggg aaacacgaac tcatggatgc cagtgaactg 3360
gtggcagaga ttaacaaact gcttcaagat gtccgccaga gc 3402

```

<210> 33
<211> 1134
<212> PRT
<213> Homo sapiens

```

<400> 33
Met His Gln Met Asn Ala Lys Met His Phe Arg Phe Val Phe Ala Leu
 1          5          10          15
Leu Ile Val Ser Phe Asn His Asp Val Leu Gly Lys Asn Leu Lys Tyr
 20          25          30
Arg Ile Tyr Glu Glu Gln Arg Val Gly Ser Val Ile Ala Arg Leu Ser
 35          40          45
Glu Asp Val Ala Asp Val Leu Lys Leu Pro Asn Pro Ser Thr Val
 50          55          60
Arg Phe Arg Ala Met Gln Arg Gly Asn Ser Pro Leu Leu Val Val Asn
 65          70          75          80
Glu Asp Asn Gly Glu Ile Ser Ile Gly Ala Thr Ile Asp Arg Glu Gln
 85          90          95
Leu Cys Gln Lys Asn Leu Asn Cys Ser Ile Glu Phe Asp Val Ile Thr
100          105          110
Leu Pro Thr Glu His Leu Gln Leu Phe His Ile Glu Val Glu Val Leu
115          120          125
Asp Ile Asn Asp Asn Ser Pro Gln Phe Ser Arg Ser Leu Ile Pro Ile

```

130		135		140
Glu Ile Ser Glu Ser	Ala Ala Val Gly Thr Arg	Ile Pro Leu Asp Ser		
145	150	155	160	
Ala Phe Asp Pro Asp	Val Gly Glu Asn Ser	Leu His Thr Tyr Ser	Leu	
	165	170	175	
Ser Ala Asn Asp Phe	Phe Asn Ile Glu Val Arg	Thr Arg Thr Asp Gly		
	180	185	190	
Ala Lys Tyr Ala Glu	Leu Ile Val Val Arg	Glu Leu Asp Arg Glu	Leu	
	195	200	205	
Lys Ser Ser Tyr Glu	Leu Gln Leu Thr Ala	Ser Asp Met Gly Val	Pro	
	210	215	220	
Gln Arg Ser Gly Ser	Ser Ile Leu Lys Ile	Ser Ile Ser Asp Ser	Asn	
225	230	235	240	
Asp Asn Ser Pro Ala	Phe Glu Gln Gln Ser	Tyr Ile Ile Gln Leu	Leu	
	245	250	255	
Glu Asn Ser Pro Val	Gly Thr Leu Leu Leu	Asp Leu Asn Ala Thr	Asp	
	260	265	270	
Pro Asp Glu Gly Ala	Asn Gly Lys Ile Val	Tyr Ser Phe Ser Ser	His	
	275	280	285	
Val Ser Pro Lys Ile	Met Glu Thr Phe Lys	Ile Asp Ser Glu Arg	Gly	
	290	295	300	
His Leu Thr Leu Phe	Lys Gln Val Asp Tyr	Glu Ile Thr Lys Ser	Tyr	
305	310	315	320	
Glu Ile Asp Val Gln	Ala Gln Asp Leu Gly	Pro Asn Ser Ile Pro	Ala	
	325	330	335	
His Cys Lys Ile Ile	Ile Lys Val Val Asp	Val Asn Asp Asn Lys	Pro	
	340	345	350	
Glu Ile Asn Ile Asn	Leu Met Ser Pro Gly	Lys Glu Glu Ile Ser	Tyr	
	355	360	365	
Ile Phe Glu Gly Asp	Pro Ile Asp Thr Phe	Val Ala Leu Val Arg	Val	
	370	375	380	
Gln Asp Lys Asp Ser	Gly Leu Asn Gly Glu	Ile Val Cys Lys Leu	His	
385	390	395	400	
Gly His Gly His Phe	Lys Leu Gln Lys Thr	Tyr Glu Asn Asn Tyr	Leu	
	405	410	415	
Ile Leu Thr Asn Ala	Thr Leu Asp Arg Glu	Lys Arg Ser Glu Tyr	Ser	
	420	425	430	
Leu Thr Val Ile Ala	Glu Asp Arg Gly Thr	Pro Ser Leu Ser Thr	Val	
	435	440	445	
Lys His Phe Thr Val	Gln Ile Asn Asp Ile	Asn Asp Asn Pro Pro	His	
	450	455	460	
Phe Gln Arg Ser Arg	Tyr Glu Phe Val Ile	Ser Glu Asn Asn Ser	Pro	
465	470	475	480	
Gly Ala Tyr Ile Thr	Thr Val Thr Ala Thr	Asp Pro Asp Leu Gly	Glu	
	485	490	495	
Asn Gly Gln Val Thr	Tyr Thr Ile Leu Glu	Ser Phe Ile Leu Gly	Ser	
	500	505	510	
Ser Ile Thr Thr Tyr	Val Thr Ile Asp Pro	Ser Asn Gly Ala Ile	Tyr	
	515	520	525	
Ala Leu Arg Ile Phe	Asp His Glu Glu Val	Ser Gln Ile Thr Phe	Val	
	530	535	540	
Val Glu Ala Arg Asp	Gly Gly Ser Pro Lys	Gln Leu Val Ser Asn	Thr	
545	550	555	560	
Thr Val Val Leu Thr	Ile Ile Asp Glu Asn	Asp Asn Val Pro Val	Val	
	565	570	575	
Ile Gly Pro Ala Leu	Arg Asn Asn Thr Ala	Glu Ile Thr Ile Pro	Lys	

1025		1030		1035		1040									
Leu	Pro	Ala	Lys	Thr	Val	Gly	Tyr	Pro	Gln	Gly	Val	Ala	Ala	Trp	Ala
				1045					1050					1055	
Ala	Ser	Thr	His	Phe	Gln	Asn	Pro	Thr	Thr	Asn	Cys	Gly	Pro	Pro	Leu
			1060					1065					1070		
Gly	Thr	His	Ser	Ser	Val	Gln	Pro	Ser	Ser	Lys	Trp	Leu	Pro	Ala	Met
		1075					1080					1085			
Glu	Glu	Ile	Pro	Glu	Asn	Tyr	Glu	Glu	Asp	Asp	Phe	Asp	Asn	Val	Leu
	1090				1095				1100						
Asn	His	Leu	Asn	Asp	Gly	Lys	His	Glu	Leu	Met	Asp	Ala	Ser	Glu	Leu
1105					1110				1115					1120	
Val	Ala	Glu	Ile	Asn	Lys	Leu	Leu	Gln	Asp	Val	Arg	Gln	Ser		
				1125					1130						

<210> 34

<220>

<223> Unknown

<400> 34

000

<210> 35

<211> 1107

<212> PRT

<213> Homo sapiens

<400> 35

Lys	Asn	Leu	Lys	Tyr	Arg	Ile	Tyr	Glu	Glu	Gln	Arg	Val	Gly	Ser	Val
1				5				10					15		
Ile	Ala	Arg	Leu	Ser	Glu	Asp	Val	Ala	Asp	Val	Leu	Leu	Lys	Leu	Pro
			20					25					30		
Asn	Pro	Ser	Thr	Val	Arg	Phe	Arg	Ala	Met	Gln	Arg	Gly	Asn	Ser	Pro
		35				40						45			
Leu	Leu	Val	Val	Asn	Glu	Asp	Asn	Gly	Glu	Ile	Ser	Ile	Gly	Ala	Thr
	50				55					60					
Ile	Asp	Arg	Glu	Gln	Leu	Cys	Gln	Lys	Asn	Leu	Asn	Cys	Ser	Ile	Glu
65				70					75						80
Phe	Asp	Val	Ile	Thr	Leu	Pro	Thr	Glu	His	Leu	Gln	Leu	Phe	His	Ile
			85					90						95	
Glu	Val	Glu	Val	Leu	Asp	Ile	Asn	Asp	Asn	Ser	Pro	Gln	Phe	Ser	Arg
		100					105					110			
Ser	Leu	Ile	Pro	Ile	Glu	Ile	Ser	Glu	Ser	Ala	Ala	Val	Gly	Thr	Arg
	115					120						125			
Ile	Pro	Leu	Asp	Ser	Ala	Phe	Asp	Pro	Asp	Val	Gly	Glu	Asn	Ser	Leu
	130				135					140					
His	Thr	Tyr	Ser	Leu	Ser	Ala	Asn	Asp	Phe	Phe	Asn	Ile	Glu	Val	Arg
145				150					155						160
Thr	Arg	Thr	Asp	Gly	Ala	Lys	Tyr	Ala	Glu	Leu	Ile	Val	Val	Arg	Glu
			165					170						175	
Leu	Asp	Arg	Glu	Leu	Lys	Ser	Ser	Tyr	Glu	Leu	Gln	Leu	Thr	Ala	Ser
		180					185					190			
Asp	Met	Gly	Val	Pro	Gln	Arg	Ser	Gly	Ser	Ser	Ile	Leu	Lys	Ile	Ser
	195					200						205			
Ile	Ser	Asp	Ser	Asn	Asp	Asn	Ser	Pro	Ala	Phe	Glu	Gln	Gln	Ser	Tyr
	210				215						220				

Ile	Ile	Gln	Leu	Leu	Glu	Asn	Ser	Pro	Val	Gly	Thr	Leu	Leu	Leu	Asp
225					230					235					240
Leu	Asn	Ala	Thr	Asp	Pro	Asp	Glu	Gly	Ala	Asn	Gly	Lys	Ile	Val	Tyr
				245					250					255	
Ser	Phe	Ser	Ser	His	Val	Ser	Pro	Lys	Ile	Met	Glu	Thr	Phe	Lys	Ile
			260					265					270		
Asp	Ser	Glu	Arg	Gly	His	Leu	Thr	Leu	Phe	Lys	Gln	Val	Asp	Tyr	Glu
		275					280					285			
Ile	Thr	Lys	Ser	Tyr	Glu	Ile	Asp	Val	Gln	Ala	Gln	Asp	Leu	Gly	Pro
290						295					300				
Asn	Ser	Ile	Pro	Ala	His	Cys	Lys	Ile	Ile	Ile	Lys	Val	Val	Asp	Val
305					310					315					320
Asn	Asp	Asn	Lys	Pro	Glu	Ile	Asn	Ile	Asn	Leu	Met	Ser	Pro	Gly	Lys
				325					330					335	
Glu	Glu	Ile	Ser	Tyr	Ile	Phe	Glu	Gly	Asp	Pro	Ile	Asp	Thr	Phe	Val
			340					345					350		
Ala	Leu	Val	Arg	Val	Gln	Asp	Lys	Asp	Ser	Gly	Leu	Asn	Gly	Glu	Ile
		355					360					365			
Val	Cys	Lys	Leu	His	Gly	His	Gly	His	Phe	Lys	Leu	Gln	Lys	Thr	Tyr
	370				375					380					
Glu	Asn	Asn	Tyr	Leu	Ile	Leu	Thr	Asn	Ala	Thr	Leu	Asp	Arg	Glu	Lys
385					390					395					400
Arg	Ser	Glu	Tyr	Ser	Leu	Thr	Val	Ile	Ala	Glu	Asp	Arg	Gly	Thr	Pro
			405						410					415	
Ser	Leu	Ser	Thr	Val	Lys	His	Phe	Thr	Val	Gln	Ile	Asn	Asp	Ile	Asn
			420					425					430		
Asp	Asn	Pro	Pro	His	Phe	Gln	Arg	Ser	Arg	Tyr	Glu	Phe	Val	Ile	Ser
		435					440					445			
Glu	Asn	Asn	Ser	Pro	Gly	Ala	Tyr	Ile	Thr	Thr	Val	Thr	Ala	Thr	Asp
	450					455					460				
Pro	Asp	Leu	Gly	Glu	Asn	Gly	Gln	Val	Thr	Tyr	Thr	Ile	Leu	Glu	Ser
465					470					475					480
Phe	Ile	Leu	Gly	Ser	Ser	Ile	Thr	Thr	Tyr	Val	Thr	Ile	Asp	Pro	Ser
			485						490					495	
Asn	Gly	Ala	Ile	Tyr	Ala	Leu	Arg	Ile	Phe	Asp	His	Glu	Glu	Val	Ser
		500						505					510		
Gln	Ile	Thr	Phe	Val	Val	Glu	Ala	Arg	Asp	Gly	Gly	Ser	Pro	Lys	Gln
	515						520					525			
Leu	Val	Ser	Asn	Thr	Thr	Val	Val	Leu	Thr	Ile	Ile	Asp	Glu	Asn	Asp
	530					535					540				
Asn	Val	Pro	Val	Val	Ile	Gly	Pro	Ala	Leu	Arg	Asn	Asn	Thr	Ala	Glu
545					550					555					560
Ile	Thr	Ile	Pro	Lys	Gly	Ala	Glu	Ser	Gly	Phe	His	Val	Thr	Arg	Ile
			565						570					575	
Arg	Ala	Ile	Asp	Arg	Asp	Ser	Gly	Val	Asn	Ala	Glu	Leu	Ser	Cys	Ala
			580					585					590		
Ile	Val	Ala	Gly	Asn	Glu	Glu	Asn	Ile	Phe	Ile	Ile	Asp	Pro	Arg	Ser
	595						600					605			
Cys	Asp	Ile	His	Thr	Asn	Val	Ser	Met	Asp	Ser	Val	Pro	Tyr	Thr	Glu
	610				615						620				
Trp	Glu	Leu	Ser	Val	Ile	Ile	Gln	Asp	Lys	Gly	Asn	Pro	Gln	Leu	His
625					630					635					640
Thr	Lys	Val	Leu	Leu	Lys	Cys	Met	Ile	Phe	Glu	Tyr	Ala	Glu	Ser	Val
			645						650					655	
Thr	Ser	Thr	Ala	Met	Thr	Ser	Val	Ser	Gln	Ala	Ser	Leu	Asp	Val	Ser
			660					665					670		
Met	Ile	Ile	Ile	Ile	Ser	Leu	Gly	Ala	Ile	Cys	Ala	Val	Leu	Leu	Val

<210> 36

<220>

<223> Unknown

<400> 36

000

<210> 37

<220>

<223> Unknown

<400> 37

000

<210> 38

<211> 295

<212> PRT

<213> Homo sapiens

<400> 38

Ala	Thr	Arg	Cys	Asn	Arg	Glu	Lys	Lys	Asp	Thr	Arg	Ser	Tyr	Asn	Cys
1				5					10					15	
Arg	Val	Ala	Glu	Ser	Thr	Tyr	Gln	His	His	Pro	Lys	Arg	Pro	Ser	Arg
			20					25					30		
Gln	Ile	His	Lys	Gly	Asp	Ile	Thr	Leu	Val	Pro	Thr	Ile	Asn	Gly	Thr
		35					40					45			
Leu	Pro	Ile	Arg	Ser	His	His	Arg	Ser	Ser	Pro	Ser	Ser	Ser	Pro	Thr
	50					55					60				
Leu	Glu	Arg	Gly	Gln	Met	Gly	Ser	Arg	Gln	Ser	His	Asn	Ser	His	Gln
65					70					75					80
Asn	Phe	Ser	Leu	Glu	Leu	Thr	His	Ala	Thr	Pro	Ala	Val	Glu	Val	Ser
				85					90					95	
Gln	Leu	Leu	Ser	Met	Leu	His	Gln	Gly	Gln	Tyr	Gln	Pro	Arg	Pro	Ser
				100					105					110	
Phe	Arg	Gly	Asn	Lys	Tyr	Ser	Arg	Ser	Tyr	Arg	Tyr	Ala	Leu	Gln	Asp
		115					120					125			
Met	Asp	Lys	Phe	Ser	Leu	Lys	Asp	Ser	Gly	Arg	Gly	Asp	Ser	Glu	Ala
	130					135					140				
Gly	Asp	Ser	Asp	Tyr	Asp	Leu	Gly	Arg	Asp	Ser	Pro	Ile	Asp	Arg	Leu
145					150					155					160
Pro	Ala	Ala	Met	Arg	Leu	Cys	Thr	Glu	Glu	Cys	Arg	Val	Leu	Gly	His
				165					170					175	
Ser	Asp	Gln	Cys	Trp	Met	Pro	Pro	Leu	Pro	Ser	Pro	Ser	Ser	Asp	Tyr
		180						185					190		
Arg	Ser	Asn	Met	Phe	Ile	Pro	Gly	Glu	Glu	Phe	Pro	Thr	Gln	Pro	Gln
		195					200					205			
Gln	Gln	His	Pro	His	Gln	Ser	Leu	Glu	Asp	Asp	Ala	Gln	Pro	Ala	Asp
	210					215					220				
Ser	Gly	Glu	Lys	Lys	Lys	Ser	Phe	Ser	Thr	Phe	Gly	Lys	Asp	Ser	Pro
225					230					235					240
Ser	Glu	Met	Ser	Ser	Val	Phe	Gln	Arg	Leu	Leu	Pro	Pro	Ser	Leu	Asp
				245					250					255	
Thr	Asn	Cys	Gly	Pro	Pro	Leu	Gly	Thr	His	Ser	Ser	Val	Gln	Pro	Ser
			260					265					270		

His Glu Leu Met Asp Ala Ser Glu Leu Val Ala Glu Ile Asn Lys Leu
 275 280 285
 Leu Gln Asp Val Arg Gln Ser
 290 295

<210> 39

<220>

<223> Unknown

<400> 39

000

<210> 40

<211> 2338

<212> DNA

<213> Homo sapiens

<400> 40

aagagatctg	agtatagttt	gactgtaatc	gctgaggaca	gggggacacc	cagtctctct	60
acagtgaaac	attttacagt	tcaaataaat	gatataaatg	acaatccacc	ccacttccag	120
agaagccgat	atgaatttgt	aatttcagaa	aataactcac	caggggcata	tatcaccact	180
gttacagcca	cagatcctga	tcttggagaa	aatgggcaag	tgacatacac	catcttggag	240
agttttattc	taggaagttc	cataactaca	tatgtaacca	ttgacccatc	taatggagcc	300
atctatgccc	tcagaatctt	tgatcatgaa	gaagtgaagc	agatcacttt	tgtggtagaa	360
gcaagagatg	gaggaagccc	gaagcaactg	gtaagcaata	ccacagttgt	gctcaccatc	420
attgacgaaa	atgacaacgt	tcctgtggtt	atagggcctg	cattgcgtaa	taatacggca	480
gaaatcacca	ttcccaaagg	ggctgaaagt	ggctttcatg	tcacaagaat	aagggaatt	540
gacagagact	ctggtgtgaa	tgctgaactc	agctgcgcca	tagtagcagg	taatgaggag	600
aatatcttca	taattgatcc	acgatcatgt	gacatccata	ccaacgtag	catggattct	660
gttccctaca	cagaatggga	gctgtcagtt	atcattcagg	acaaaggcaa	tcctcagcta	720
cataccaaag	tccttctgaa	gtgcatgata	tttgaatatg	cagagtcggt	gacaagtaca	780
gcaatgactt	cagtaagcca	ggcatccttg	gatgtctcca	tgataataat	tatttcctta	840
ggagcaattt	gtgcagtggt	gctgggtatt	atgggtgctat	ttgcaactag	gtgtaaccgc	900
gagaagaaaag	acactagatc	ctataactgc	aggggtggccg	aatcaactta	ccagcaccac	960
ccaaaaaggc	catcccggca	gattcacaaa	ggggacatca	cattggtgcc	taccataaat	1020
ggcactctgc	ccatcagatc	tcatacacaga	tcgtctccat	cttcactctc	taccttagaa	1080
agagggcaga	tgggcagccg	gcagagtcac	aacagtcacc	agtcactcaa	cagtttggtg	1140
acaatctcat	caaaccacgt	gccagagaat	ttctcattag	aactcaccca	cgccactcct	1200
gctgttgagc	aggtctctca	gcttctttca	atgcttcacc	aggggcaata	tcagccaaga	1260
ccaagttttc	gaggaaacaa	atattccagg	agctacagat	atgcccttca	agacatggac	1320
aaatttagct	tgaaagacag	tggccgtggt	gacagtgagg	caggagacag	tgattatgat	1380
ttggggcgag	attctccaat	agataggctg	ttgggtgaag	gattcagcga	cctgtttctc	1440
acagatggaa	gaattccagc	agctatgaga	ctctgcacgg	aggagtgcag	ggtcctggga	1500
cactctgacc	agtgtgtgat	gccaccactg	ccctcacctg	cttctgatta	taggagtaac	1560
atgttcattc	caggggaaga	attcccaacg	caaccccagc	agcagcatcc	acatcagagt	1620
cttgaggatg	acgctcagcc	tgagatttcc	ggtgaaaaga	agaagagttt	ttccaccttt	1680
ggaaaggact	ccccaaacga	tgaggacact	ggggatacca	gcacatcatc	tctgtctctg	1740
gaaatgagca	gtgtgttcca	gcgtctctta	ccgccttccc	tggacaccta	ttctgaatgc	1800
agttaggtgg	atcgggtccaa	ctccctggag	cgcaggaagg	gacccttgcc	agccaaaact	1860
gtgggttacc	cacagggggg	agcggcatgg	gcagccagta	cgcattttca	aaatcccacc	1920
accaactgtg	ggccgccact	tggaaactcac	tccagtgtgc	agccttcttc	aaaatggctg	1980
ccagccatgg	aggagatccc	tgaaaattat	gaggaagatg	attttgacaa	tgtgctcaac	2040
cacctcaatg	atgggaaaca	cgaactcatg	gatgccagtg	aactggtggc	agagattaac	2100
aaactgcttc	aagatgtccg	ccagagctag	gagattttag	cgaagcattt	ttgtttccat	2160

gtatatggaa	ataggggaaca	acaacaacaa	caaaaaaccc	tgaaagaact	ggcattgcca	2220
aatagttgca	tttatcataa	atgtgtctgt	gtatattgaa	tattaaatac	tgtatttttcg	2280
tatgtacaca	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaag	2338

<210> 41
 <211> 3540
 <212> DNA
 <213> Mus sp.

<400> 41

atgatgctac	ttctgccatt	cctgctaggg	ctcttagggc	caggaagcta	cttgttcatt	60
tcaggggatt	gtcaggaggt	ggccactgtc	atgggtgaaat	tccaagtgaac	agagggaagt	120
ccgtctggca	cggatgatag	gaaactgtcc	caagaactaa	gagtggagga	gaggcgtggg	180
aaggcaggag	atgccttcca	gattctgcag	ctgcctcagg	cactgccggg	tcagatgaac	240
tctgaggacg	gcctgctcag	cacttccagc	cggctggatc	gggagaagct	atgtcggcag	300
gaagatccct	gtctggtgtc	atctgacgtg	cttgccacag	gggcgtctgc	tctaattcat	360
gtggagattc	aggtgctaga	catcaatgac	caccagccac	agtttcccaa	agacgagcag	420
gaactggaaa	tctcagagag	tgctctctct	cacacacgaa	tccccttgga	cagagctctt	480
gaccaagaca	cgggtcctaa	cagcttatat	tctactccc	tgtctcccag	tgaacacttt	540
gccctggatg	ttattgtggg	ccctgatgag	accaaactat	cagagcttgt	ggtggtgaag	600
gagttggaca	gggaactcca	ctcatatctt	gatctggtgc	tgaccgccta	tgacaatggg	660
aatcccccta	agtcaggaat	cagcgtggtc	aaggtcaatg	tcttggaact	caatgacaat	720
agtccagtgt	ttgctgagag	ttcactagca	ctagaaatcc	cagaagacac	tgttcctggg	780
actcttctca	taaacctgac	tgctacagat	cccgaaccaag	gacccaatgg	ggaggtagag	840
ttcttctttg	gcaagcatgt	gtccccagag	gtgatgaaca	cctttggcat	agatgccaag	900
acaggccaga	tcattctgag	ccaagcccta	gattacgaga	agaaccctgc	ctatgagggt	960
gatgtccagg	caagggattt	gggtcccaat	tccatcccag	gccattgcaa	agttcttatc	1020
aaagttcttg	atgtcaatga	caatgcccc	agcctcctca	tcacgtgggc	ctcccagacg	1080
tcgctggtgt	cagaagatct	tcccagggat	agcttcattg	cccttgtagc	tgccaatgac	1140
ttggactcag	gaaacaacgg	tctcgtccac	tggttggtga	atcaagagct	gggccacttc	1200
agactgaaaa	ggactaacgg	caacacgtac	atgtctgcta	ccaatgccac	actggacaga	1260
gagcagtggc	ccatatatac	tctcactgtg	tttgcccaag	accaaggacc	ccagccctta	1320
tcagctgaga	aggagctcca	aattcagggt	agtgatgtca	atgacaatgc	ccctgtgttt	1380
gagaagagcc	ggtacgaggt	ctccacttgg	gaaaataacc	caccctctct	tcacctcatc	1440
acgctcaaa	cgcctgatgc	tgacttgggc	agtaatggaa	aagtgtcata	ccgtatcaag	1500
gactcccccg	tttctcactt	agtcattatt	gactttgaaa	caggagaagt	cactgctcag	1560
aggtcactgg	actatgaaca	gatggcaggc	tttgagttcc	aggtgatagc	agaggacaga	1620
gggcaacccc	agctcgcac	cagcatctcg	gtgtgggtta	gcctcttgga	tgccaatgat	1680
aatgccccag	aagtgattca	gcctgtgctc	agtgaaggca	aagccaccct	ttcgggtgct	1740
gtaaatgcct	ccacgggcca	ccttctgttg	cccattgaga	atcccagtgg	catggatcca	1800
gcagggtactg	gtataaccac	aaaggctacc	cacagcccct	ggtctttcct	tttggttaaca	1860
atcgtggcta	gggatgcaga	ctcggggggc	aatgggggaa	tcttctacag	cattcaaagt	1920
gggaatgatg	ctcatctctt	tttctctcag	ccttctcttg	ggcagctatt	cattaatgtc	1980
accaatgcca	gcagcctcat	cgggagtcag	tgggacctgg	ggatagtggt	agaggaccag	2040
ggcagcccct	ccttgccagac	ccaagtttca	ttgaaggctc	tgtttgtagc	cagtgtggac	2100
cacctaaggg	attctgctca	tgagcccggg	gttctgagca	caccagcact	ggctttgatc	2160
tgcctggctg	tactgctggc	catctttgga	ttgctcttag	ccctgttctg	gtccatctgc	2220
aggacagaga	gaaaggataa	tagggcctac	aactgtcgag	aagctgagtc	gtcataccgc	2280
caccagccca	agaggcccca	gaaacacatt	cagaaggcag	atatccacct	ggtgcctgtg	2340
cttagggccc	acgagaatga	gactgatgaa	gtcaggccat	ctcacaagga	taccagcaag	2400
gagacactga	tggaggcagg	ctgggactct	tgcttgaggg	cccccttcca	cctcacacca	2460
accctataca	ggaccctgag	taaccaaggc	aaccaggagg	aactggcaga	gagccaggag	2520
gtactgcagg	acaccttcaa	ctttctcttt	aaccatccca	ggcagaggaa	tgctctcccg	2580
gagaacctaa	accttcctga	gtccccacct	gctgtacgcc	aaccactctt	aaggcctctg	2640
aaggtgcctg	gtagccccc	agcgaggggc	actggagacc	aagacaagga	ggaggcccca	2700
cagagcccac	cagcgtcctc	tgcaacccta	agacgacagc	ggaatttcaa	tggaacagtg	2760
tctcctagag	gagagtcagg	tcctcatcag	attctgagga	gcctggttag	gctctctgtg	2820

gctgcttttg cggaacggaa cccggtggag gagcctgctg gggactctcc tcctgtccag 2880
 caaatctccc agctgctgtc cttgctgcac cagggccaat tccagcccaa accaaaccac 2940
 cgaggaaata aatacttggc caagcccggc ggcagcagca ggggtaccat cccagacaca 3000
 gagggccttg taggcctcaa gcctagtggc caagcagaac ctgacctgga agaagggccc 3060
 ccgagcccgg aggaggacct ttctgtaaag cgacttctag aagaagagct gtcgagcctg 3120
 ttggacccta atacaggtct agccctggac aagctgagtc cgcctgaccc agcctggatg 3180
 gcgagattgt cattgccctt caccaccaat tatcgagaca acttgtcttc ccccgatgct 3240
 acaacatcag aggaaccgag aaccttccag acattcggca agacagttgg accgggaccc 3300
 gagctgagcc caacaggcac gcgcctggcc agcactttcg tctcggagat gagctctctg 3360
 ctggaaatgt tgttggggca gcacacggtg ccagtgggaag ctgcgtccgc ggctttgcgg 3420
 aggctctcgg tgtgcgggag gaccctcagt ctagacctag ccaccagtgg ggcttcagct 3480
 tcagaagcac agggtagaaa gaaggcagct gagagcagac ttggctgtgg caggaatcta 3540

<210> 42
 <211> 1135
 <212> PRT
 <213> Mus sp.

<400> 42
 Met Met Leu Leu Pro Phe Leu Leu Gly Leu Leu Gly Pro Gly Ser
 1 5 10 15
 Tyr Leu Phe Ile Ser Gly Asp Cys Gln Glu Val Ala Thr Val Met Val
 20 25 30
 Lys Phe Gln Val Thr Glu Glu Val Pro Ser Gly Thr Val Ile Gly Lys
 35 40 45
 Asp Ala Phe Gln Ile Leu Gln Leu Pro Gln Ala Leu Pro Val Gln Met
 50 55 60
 Asn Ser Glu Asp Gly Leu Leu Ser Thr Ser Ser Arg Leu Asp Arg Glu
 65 70 75 80
 Lys Leu Cys Arg Gln Glu Asp Pro Cys Leu Val Ser Phe Asp Val Leu
 85 90 95
 Ala Thr Gly Ala Ser Ala Leu Ile His Val Glu Ile Gln Val Leu Asp
 100 105 110
 Ile Asn Asp His Gln Pro Gln Phe Pro Lys Asp Glu Gln Glu Leu Glu
 115 120 125
 Ile Ser Glu Ser Ala Ser Leu His Thr Arg Ile Pro Leu Asp Arg Ala
 130 135 140
 Leu Asp Gln Asp Thr Gly Pro Asn Ser Leu Tyr Ser Tyr Ser Leu Ser
 145 150 155 160
 Pro Ser Glu His Phe Ala Leu Asp Val Ile Val Gly Pro Asp Glu Thr
 165 170 175
 Lys His Ala Glu Leu Val Val Val Lys Glu Leu Asp Arg Glu Leu His
 180 185 190
 Ser Tyr Phe Asp Leu Val Leu Thr Ala Tyr Asp Asn Gly Asn Pro Pro
 195 200 205
 Lys Ser Gly Ile Ser Val Val Lys Val Asn Val Leu Asp Ser Asn Asp
 210 215 220
 Asn Ser Pro Val Phe Ala Glu Ser Ser Leu Ala Leu Glu Ile Pro Glu
 225 230 235 240
 Asp Thr Val Pro Gly Thr Leu Leu Ile Asn Leu Thr Ala Thr Asp Pro
 245 250 255
 Asp Gln Gly Pro Asn Gly Glu Val Glu Phe Phe Phe Gly Lys His Val
 260 265 270
 Ser Pro Glu Val Met Asn Thr Phe Gly Ile Asp Ala Lys Thr Gly Gln
 275 280 285
 Ile Ile Leu Arg Gln Ala Leu Asp Tyr Glu Lys Asn Pro Ala Tyr Glu

290	295	300
Val Asp Val Gln Ala Arg Asp Leu Gly Pro Asn Ser Ile Pro Gly His		
305	310	315
Cys Lys Val Leu Ile Lys Val Leu Asp Val Asn Asp Asn Ala Pro Ser		
	325	330
Ile Leu Ile Thr Trp Ala Ser Gln Thr Ser Leu Val Ser Glu Asp Leu		
	340	345
Pro Arg Asp Ser Phe Ile Ala Leu Val Ser Ala Asn Asp Leu Asp Ser		
	355	360
Gly Asn Asn Gly Leu Val His Cys Trp Leu Asn Gln Glu Leu Gly His		
	370	375
Phe Arg Leu Lys Arg Thr Asn Gly Asn Thr Tyr Met Leu Leu Thr Asn		
385	390	395
Ala Thr Leu Asp Arg Glu Gln Trp Pro Ile Tyr Thr Leu Thr Val Phe		
	405	410
Ala Gln Asp Gln Gly Pro Gln Pro Leu Ser Ala Glu Lys Glu Leu Gln		
	420	425
Ile Gln Val Ser Asp Val Asn Asp Asn Ala Pro Val Phe Glu Lys Ser		
	435	440
Arg Tyr Glu Val Ser Thr Trp Glu Asn Asn Pro Pro Ser Leu His Leu		
450	455	460
Ile Thr Leu Lys Ala His Asp Ala Asp Leu Gly Ser Asn Gly Lys Val		
465	470	475
Ser Tyr Arg Ile Lys Asp Ser Pro Val Ser His Leu Val Ile Ile Asp		
	485	490
Phe Glu Thr Gly Glu Val Thr Ala Gln Arg Ser Leu Asp Tyr Glu Gln		
	500	505
Met Ala Gly Phe Glu Phe Gln Val Ile Ala Glu Asp Arg Gly Gln Pro		
	515	520
Gln Leu Ala Ser Ser Ile Ser Val Trp Val Ser Leu Leu Asp Ala Asn		
	530	535
Asp Asn Ala Pro Glu Val Ile Gln Pro Val Leu Ser Glu Gly Lys Ala		
545	550	555
Thr Leu Ser Val Leu Val Asn Ala Ser Thr Gly His Leu Leu Leu Pro		
	565	570
Ile Glu Asn Pro Ser Gly Met Asp Pro Ala Gly Thr Gly Ile Pro Pro		
	580	585
Lys Ala Thr His Ser Pro Trp Ser Phe Leu Leu Leu Thr Ile Val Ala		
	595	600
Arg Asp Ala Asp Ser Gly Ala Asn Gly Glu Leu Phe Tyr Ser Ile Gln		
	610	615
Ser Gly Asn Asp Ala His Leu Phe Phe Leu Ser Pro Ser Leu Gly Gln		
625	630	635
Leu Phe Ile Asn Val Thr Asn Ala Ser Ser Leu Ile Gly Ser Gln Trp		
	645	650
Asp Leu Gly Ile Val Val Glu Asp Gln Gly Ser Pro Ser Leu Gln Thr		
	660	665
Gln Val Ser Leu Lys Val Val Phe Val Thr Ser Val Asp His Leu Arg		
	675	680
Asp Ser Ala His Glu Pro Gly Val Leu Ser Thr Pro Ala Leu Ala Leu		
	690	695
Ile Cys Leu Ala Val Leu Leu Ala Ile Phe Gly Leu Leu Leu Ala Leu		
705	710	715
Phe Val Ser Ile Cys Arg Thr Glu Arg Lys Asp Asn Arg Ala Tyr Asn		
	725	730
Cys Arg Glu Ala Glu Ser Ser Tyr Arg His Gln Pro Lys Arg Pro Gln		
	740	745
		750

Lys	His	Ile	Gln	Lys	Ala	Asp	Ile	His	Leu	Val	Pro	Val	Leu	Arg	Ala	
		755					760					765				
His	Glu	Asn	Glu	Thr	Asp	Glu	Val	Arg	Pro	Ser	His	Lys	Asp	Thr	Ser	
		770				775					780					
Lys	Glu	Thr	Leu	Met	Glu	Ala	Gly	Trp	Asp	Ser	Cys	Leu	Glu	Ala	Pro	
785					790					795					800	
Phe	His	Leu	Thr	Pro	Thr	Leu	Tyr	Arg	Thr	Leu	Arg	Asn	Gln	Gly	Asn	
				805					810					815		
Gln	Gly	Glu	Leu	Ala	Glu	Ser	Gln	Glu	Val	Leu	Gln	Asp	Thr	Phe	Asn	
			820					825					830			
Phe	Leu	Phe	Asn	His	Pro	Arg	Gln	Arg	Asn	Ala	Ser	Arg	Glu	Asn	Leu	
		835					840					845				
Asn	Leu	Pro	Glu	Ser	Pro	Pro	Ala	Val	Arg	Gln	Pro	Leu	Leu	Arg	Pro	
		850				855					860					
Leu	Lys	Val	Pro	Gly	Ser	Pro	Ile	Ala	Arg	Ala	Thr	Gly	Asp	Gln	Asp	
865					870					875					880	
Lys	Glu	Glu	Ala	Pro	Gln	Ser	Pro	Pro	Ala	Ser	Ser	Ala	Thr	Leu	Arg	
				885					890						895	
Arg	Gln	Arg	Asn	Phe	Asn	Gly	Lys	Val	Ser	Pro	Arg	Gly	Glu	Ser	Gly	
			900				905						910			
Pro	His	Gln	Ile	Leu	Arg	Ser	Leu	Val	Arg	Leu	Ser	Val	Ala	Ala	Phe	
		915					920					925				
Ala	Glu	Arg	Asn	Pro	Val	Glu	Glu	Pro	Ala	Gly	Asp	Ser	Pro	Pro	Val	
		930				935					940					
Gln	Gln	Ile	Ser	Gln	Leu	Leu	Ser	Leu	Leu	His	Gln	Gly	Gln	Phe	Gln	
945					950					955					960	
Pro	Lys	Pro	Asn	His	Arg	Gly	Asn	Lys	Tyr	Leu	Ala	Lys	Pro	Gly	Gly	
			965					970						975		
Ser	Ser	Arg	Gly	Thr	Ile	Pro	Asp	Thr	Glu	Gly	Leu	Val	Gly	Leu	Lys	
			980					985					990			
Pro	Ser	Gly	Gln	Ala	Glu	Pro	Asp	Leu	Glu	Glu	Gly	Pro	Pro	Ser	Pro	
		995					1000					1005				
Leu	Ser	Ser	Leu	Leu	Asp	Pro	Asn	Thr	Gly	Leu	Ala	Leu	Asp	Lys	Leu	
		1010				1015					1020					
Ser	Pro	Pro	Asp	Pro	Ala	Trp	Met	Ala	Arg	Leu	Ser	Leu	Pro	Leu	Thr	
1025					1030					1035					1040	
Ser	Glu	Glu	Pro	Arg	Thr	Phe	Gln	Thr	Phe	Gly	Lys	Thr	Val	Gly	Pro	
				1045					1050					1055		
Gly	Pro	Glu	Leu	Ser	Pro	Thr	Gly	Thr	Arg	Leu	Ala	Ser	Thr	Phe	Val	
			1060					1065					1070			
Ser	Glu	Met	Ser	Ser	Leu	Leu	Glu	Met	Leu	Leu	Gly	Gln	His	Thr	Val	
		1075					1080					1085				
Pro	Val	Glu	Ala	Ala	Ser	Ala	Ala	Leu	Arg	Arg	Leu	Ser	Val	Cys	Gly	
		1090				1095					1100					
Arg	Thr	Leu	Ser	Leu	Asp	Leu	Ala	Thr	Ser	Gly	Ala	Ser	Ala	Ser	Glu	
1105					1110					1115					1120	
Ala	Gln	Gly	Arg	Lys	Lys	Ala	Ala	Glu	Ser	Arg	Leu	Gly	Cys	Gly		
				1125					1130					1135		

<210> 43

<220>

<223> Unknown

<400> 43

000

<210> 44

<220>

<223> Unknown

<400> 44

000

<210> 45

<220>

<223> Unknown

<400> 45

000

<210> 46

<220>

<223> Unknown

<400> 46

000

<210> 47

<220>

<223> Unknown

<400> 47

000

<210> 48

<220>

<223> Unknown

<400> 48

000

<210> 49

<220>

<223> Unknown

<400> 49

000

<210> 50

<220>

<223> Unknown

<400> 50

000

<210> 51
 <211> 2330
 <212> DNA
 <213> Homo sapiens

<400> 51
 gaagtgggat gtgcaaaagc gccggctgga aatccccggt gtgtctccgt caactcttta 60
 cgcaacagag gtctccccct gcccttggtt tctaccgggc cgctgctcc cactcggcga 120
 aaaaaattac acaacagcag ccgcgcgat gacgtggagg gctgccgcct ccacgtgcgc 180
 ggcgctcctg attctgctgt gggcgctgac gaccgaaggt gatctgaaag tagagatgat 240
 ggcagggggg actcagatca caccctgaa tgacaatgtc accatattct gcaatatctt 300
 ttattcccaa cccctcaaca tcacgtctat gggatcacc tggttttgga agagtctgac 360
 gtttgacaaa gaagtcaaag tctttgaatt ttttggagat caccaagagg cattccgacc 420
 tggagccatt gtgtctccat ggaggctgaa gagtggggac gcctcactgc ggctgcctgg 480
 aatccagctg gaggaagcag gagagtaccg atgtgaggtg gtggtcacc cttctgaaggc 540
 acaggggaaca gtccagcttg aagttgtggc tccccagcc agcagattgt tgctggatca 600
 agtgggcatg aaagagaatg aagacaaata tatgtgtgag tcaagtgggt tctaccaga 660
 ggctattaat ataacatggg agaagcagac ccagaagttt ccccatccca tagagatttc 720
 tgaggatgtc atcactgggt ccaccatcaa gaatatggat ggcacattta atgtcactag 780
 ctgcttgaag ctgaactcct ctcaggaaga ccctgggact gtctaccagt gtgtggtacg 840
 gcatgcgtcc ttgcataccc ccttgaggag caactttacc ctgactgctg ctcggcacag 900
 tctttctgaa actgagaaga cagataatct ttcattcat tgggtggccta tttcattcat 960
 tgggtgttga ctggttttat taattgtttt gattccttgg aaaaaggtaa ggggctccaa 1020
 agcaaagtcc agccctgtgt cttgggctag taaaaagctt ttagagcagc tgctgccaac 1080
 cttacaagcc tcaagggaca ggcctgctgg aaaggacttt gtcagtcctt cttcaccatc 1140
 aggtgttggg aatgttggct gtgttccaat ccagtttctt atcacagagg acctagctgt 1200
 cacataccat ctgacctctg tatggtgggt tgtgactctg ggggtgatgtg ttgtaaagcc 1260
 tccctctctt tctccatact aaacaagtat tatatctctg tgaatgaacc agacttttagt 1320
 gttcagacca ggcctgaac tatgtgtgga ctgcttgttt ttctcacaca tttagaaact 1380
 atggcttaga gaggggaatt cctcatattt tatctgatca ataactgacc accagatctc 1440
 actagtttga ctaagaatct ctaaccctca ctaggatttt ctaaaactaa acatgtttct 1500
 aaacattttt atccctgact atggcccaa tagtaataaa aacagctcaa gcttttagagg 1560
 cccaagagac ctatgtaaat gtgttgggtt aaatagtttt agataataaa agggccctca 1620
 attatttatg ggcctgtcaa ggcaaaatct gcacaacagc cagtacatct cattataaat 1680
 aattaggag aagtggaata atcagtcaat taagaaaaat ggccttttat ctaaagttgg 1740
 ccatttagat tcacgggact tattcctgtt ggatctaggc catgagaaaa ctggataaaa 1800
 agtgggtttt aaatgtttct tgtggtattt gtgactgttg tcatatttct tgcctttctc 1860
 tggttctgat attcaggtgc tattgagaga ggaggaagga agaaactagt caggcaggca 1920
 gttagggttg gccctcagtc aaattccttc aaacaaaaga acagcctgaa aaatcaaact 1980
 gcagataagg gaacttgtag aggggggctt gcctaaaaca tgcccacagc cacatacatt 2040
 aaaacaaggc tacacaggag acttgcctag acatgctcac aatagaaaat tccatcccct 2100
 gacacatgca cagtaagggg aacaaagcca catggagtaa ctcaagctaa gggcttgcac 2160
 gcacactacg aggatggggt ggagctacca gaaatgtgtg ccttatgcct ttgtattcag 2220
 ctgtgaaatg gcaaccctct tttgggcccc ctctctgcag tggagtgcct tcttcttttg 2280
 cttattaaac tttcacttca acttcaaaaa aaaaaaaaaa aaaaaaaaaa 2330

<210> 52
 <211> 1095
 <212> DNA
 <213> Homo sapiens

<400> 52
 atgacgtgga gggctgccgc ctccacgtgc gcggcgctcc tgattctgct gtgggcgctg 60
 acgaccgaag gtgatctgaa agtagagatg atggcagggg ggactcagat cacaccctg 120
 aatgacaatg tcaccatatt ctgcaatatc ttttattccc aaccctcaa catcacgtct 180
 atgggtatca cctggttttg gaagagtctg acgtttgaca aagaagtcaa agtctttgaa 240
 ttttttggag atcaccaaga ggcattccga cctggagcca ttgtgtctcc atggaggctg 300

```

aagagtgggg acgcctcact gcggctgcct ggaatccagc tggaggaagc aggagagtac 360
cgatgtgagg tgggtggcac ccctctgaag gcacagggaa cagtccagct tgaagttgtg 420
gcttccccag ccagcagatt gttgctggat caagtgggca tgaaagagaa tgaagacaaa 480
tatatgtgtg agtcaagtgg gttctaccca gaggtatta atataacatg ggagaagcag 540
accagaagt ttccccatcc catagagatt tctgaggatg tcatcactgg tcccaccatc 600
aagaatatgg atggcacatt taatgtcact agctgcttga agctgaactc ctctcaggaa 660
gaccctggga ctgtctacca gtgtgtggta cggcatgcgt ccttgcatatc ccccttgagg 720
agcaacttta ccctgactgc tgctcggcac agtctttctg aaactgagaa gacagataat 780
ttttccattc attggtggcc tatttcattc attggtgttg gactgggtttt attaattgtt 840
ttgattcctt ggaaaaaggt aaggggctcc aaagcaaagt tcagccctgt gtcttgggct 900
agtaaaaagc ttttagagca gctgctgcca accttacaag cctcaaggga caggcctgct 960
ggaaaggact ttgtcagtc cttctcacca tcagggtgttg ggaatgttg ctgtgttcca 1020
atccagtttc ctatcacaga ggacctagct gtcacatacc atctgacctc tgtatggtgg 1080
tttgtgactc tggggg

```

```

<210> 53
<211> 365
<212> PRT
<213> Homo sapiens

```

```

<400> 53
Met Thr Trp Arg Ala Ala Ala Ser Thr Cys Ala Ala Leu Leu Ile Leu
 1          5          10          15
Leu Trp Ala Leu Thr Thr Glu Gly Asp Leu Lys Val Glu Met Met Ala
 20          25          30
Gly Gly Thr Gln Ile Thr Pro Leu Asn Asp Asn Val Thr Ile Phe Cys
 35          40          45
Asn Ile Phe Tyr Ser Gln Pro Leu Asn Ile Thr Ser Met Gly Ile Thr
 50          55          60
Trp Phe Trp Lys Ser Leu Thr Phe Asp Lys Glu Val Lys Val Phe Glu
 65          70          75          80
Phe Phe Gly Asp His Gln Glu Ala Phe Arg Pro Gly Ala Ile Val Ser
 85          90          95
Pro Trp Arg Leu Lys Ser Gly Asp Ala Ser Leu Arg Leu Pro Gly Ile
100          105          110
Gln Leu Glu Glu Ala Gly Glu Tyr Arg Cys Glu Val Val Val Thr Pro
115          120          125
Leu Lys Ala Gln Gly Thr Val Gln Leu Glu Val Val Ala Ser Pro Ala
130          135          140
Ser Arg Leu Leu Leu Asp Gln Val Gly Met Lys Glu Asn Glu Asp Lys
145          150          155          160
Tyr Met Cys Glu Ser Ser Gly Phe Tyr Pro Glu Ala Ile Asn Ile Thr
165          170          175
Trp Glu Lys Gln Thr Gln Lys Phe Pro His Pro Ile Glu Ile Ser Glu
180          185          190
Asp Val Ile Thr Gly Pro Thr Ile Lys Asn Met Asp Gly Thr Phe Asn
195          200          205
Val Thr Ser Cys Leu Lys Leu Asn Ser Ser Gln Glu Asp Pro Gly Thr
210          215          220
Val Tyr Gln Cys Val Val Arg His Ala Ser Leu His Thr Pro Leu Arg
225          230          235          240
Ser Asn Phe Thr Leu Thr Ala Ala Arg His Ser Leu Ser Glu Thr Glu
245          250          255
Lys Thr Asp Asn Phe Ser Ile His Trp Trp Pro Ile Ser Phe Ile Gly
260          265          270
Val Gly Leu Val Leu Leu Ile Val Leu Ile Pro Trp Lys Lys Val Arg
275          280          285

```

Gly	Ser	Lys	Ala	Lys	Phe	Ser	Pro	Val	Ser	Trp	Ala	Ser	Lys	Lys	Leu
290						295					300				
Leu	Glu	Gln	Leu	Leu	Pro	Thr	Leu	Gln	Ala	Ser	Arg	Asp	Arg	Pro	Ala
305					310					315					320
Gly	Lys	Asp	Phe	Val	Ser	Pro	Ser	Ser	Pro	Ser	Gly	Val	Gly	Asn	Val
				325					330					335	
Gly	Cys	Val	Pro	Ile	Gln	Phe	Pro	Ile	Thr	Glu	Asp	Leu	Ala	Val	Thr
			340					345					350		
Tyr	His	Leu	Thr	Ser	Val	Trp	Trp	Phe	Val	Thr	Leu	Gly			
		355					360					365			

<210> 54
 <211> 341
 <212> PRT
 <213> Homo sapiens

<400> 54

Asp	Leu	Lys	Val	Glu	Met	Met	Ala	Gly	Gly	Thr	Gln	Ile	Thr	Pro	Leu
1				5					10					15	
Asn	Asp	Asn	Val	Thr	Ile	Phe	Cys	Asn	Ile	Phe	Tyr	Ser	Gln	Pro	Leu
			20					25					30		
Asn	Ile	Thr	Ser	Met	Gly	Ile	Thr	Trp	Phe	Trp	Lys	Ser	Leu	Thr	Phe
		35				40						45			
Asp	Lys	Glu	Val	Lys	Val	Phe	Glu	Phe	Phe	Gly	Asp	His	Gln	Glu	Ala
50						55				60					
Phe	Arg	Pro	Gly	Ala	Ile	Val	Ser	Pro	Trp	Arg	Leu	Lys	Ser	Gly	Asp
65					70					75					80
Ala	Ser	Leu	Arg	Leu	Pro	Gly	Ile	Gln	Leu	Glu	Glu	Ala	Gly	Glu	Tyr
				85					90					95	
Arg	Cys	Glu	Val	Val	Val	Thr	Pro	Leu	Lys	Ala	Gln	Gly	Thr	Val	Gln
			100					105						110	
Leu	Glu	Val	Val	Ala	Ser	Pro	Ala	Ser	Arg	Leu	Leu	Leu	Asp	Gln	Val
		115					120						125		
Gly	Met	Lys	Glu	Asn	Glu	Asp	Lys	Tyr	Met	Cys	Glu	Ser	Ser	Gly	Phe
130						135				140					
Tyr	Pro	Glu	Ala	Ile	Asn	Ile	Thr	Trp	Glu	Lys	Gln	Thr	Gln	Lys	Phe
145					150					155					160
Pro	His	Pro	Ile	Glu	Ile	Ser	Glu	Asp	Val	Ile	Thr	Gly	Pro	Thr	Ile
				165					170					175	
Lys	Asn	Met	Asp	Gly	Thr	Phe	Asn	Val	Thr	Ser	Cys	Leu	Lys	Leu	Asn
			180					185					190		
Ser	Ser	Gln	Glu	Asp	Pro	Gly	Thr	Val	Tyr	Gln	Cys	Val	Val	Arg	His
		195					200					205			
Ala	Ser	Leu	His	Thr	Pro	Leu	Arg	Ser	Asn	Phe	Thr	Leu	Thr	Ala	Ala
210						215					220				
Arg	His	Ser	Leu	Ser	Glu	Thr	Glu	Lys	Thr	Asp	Asn	Phe	Ser	Ile	His
225					230					235					240
Trp	Trp	Pro	Ile	Ser	Phe	Ile	Gly	Val	Gly	Leu	Val	Leu	Leu	Ile	Val
				245					250					255	
Leu	Ile	Pro	Trp	Lys	Lys	Val	Arg	Gly	Ser	Lys	Ala	Lys	Phe	Ser	Pro
		260						265					270		
Val	Ser	Trp	Ala	Ser	Lys	Lys	Leu	Leu	Glu	Gln	Leu	Leu	Pro	Thr	Leu
		275					280					285			
Gln	Ala	Ser	Arg	Asp	Arg	Pro	Ala	Gly	Lys	Asp	Phe	Val	Ser	Pro	Ser
290						295					300				

Ser	Pro	Ser	Gly	Val	Gly	Asn	Val	Gly	Cys	Val	Pro	Ile	Gln	Phe	Pro
305					310					315					320
Ile	Thr	Glu	Asp	Leu	Ala	Val	Thr	Tyr	His	Leu	Thr	Ser	Val	Trp	Trp
				325					330					335	
Phe	Val	Thr	Leu	Gly											
			340												

<210> 55
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 55															
Met	Thr	Trp	Arg	Ala	Ala	Ala	Ser	Thr	Cys	Ala	Ala	Leu	Leu	Ile	Leu
1				5					10					15	
Leu	Trp	Ala	Leu	Thr	Thr	Glu	Gly								
				20											

<210> 56
 <211> 239
 <212> PRT
 <213> Homo sapiens

<400> 56															
Leu	Lys	Val	Glu	Met	Met	Ala	Gly	Gly	Thr	Gln	Ile	Thr	Pro	Leu	Asn
1				5					10					15	
Asp	Asn	Val	Thr	Ile	Phe	Cys	Asn	Ile	Phe	Tyr	Ser	Gln	Pro	Leu	Asn
			20					25					30		
Ile	Thr	Ser	Met	Gly	Ile	Thr	Trp	Phe	Trp	Lys	Ser	Leu	Thr	Phe	Asp
		35					40					45			
Lys	Glu	Val	Lys	Val	Phe	Glu	Phe	Phe	Gly	Asp	His	Gln	Glu	Ala	Phe
	50				55						60				
Arg	Pro	Gly	Ala	Ile	Val	Ser	Pro	Trp	Arg	Leu	Lys	Ser	Gly	Asp	Ala
65					70					75					80
Ser	Leu	Arg	Leu	Pro	Gly	Ile	Gln	Leu	Glu	Ala	Gly	Glu	Tyr	Arg	
				85					90					95	
Cys	Glu	Val	Val	Val	Thr	Pro	Leu	Lys	Ala	Gln	Gly	Thr	Val	Gln	Leu
			100					105					110		
Glu	Val	Val	Ala	Ser	Pro	Ala	Ser	Arg	Leu	Leu	Leu	Asp	Gln	Val	Gly
			115					120					125		
Met	Lys	Glu	Asn	Glu	Asp	Lys	Tyr	Met	Cys	Glu	Ser	Ser	Gly	Phe	Tyr
	130					135					140				
Pro	Glu	Ala	Ile	Asn	Ile	Thr	Trp	Glu	Lys	Gln	Thr	Gln	Lys	Phe	Pro
145					150					155					160
His	Pro	Ile	Glu	Ile	Ser	Glu	Asp	Val	Ile	Thr	Gly	Pro	Thr	Ile	Lys
				165					170					175	
Asn	Met	Asp	Gly	Thr	Phe	Asn	Val	Thr	Ser	Cys	Leu	Lys	Leu	Asn	Ser
			180					185					190		
Ser	Gln	Glu	Asp	Pro	Gly	Thr	Val	Tyr	Gln	Cys	Val	Val	Arg	His	Ala
			195				200					205			
Ser	Leu	His	Thr	Pro	Leu	Arg	Ser	Asn	Phe	Thr	Leu	Thr	Ala	Ala	Arg
	210					215					220				
His	Ser	Leu	Ser	Glu	Thr	Glu	Lys	Thr	Asp	Asn	Phe	Ser	Ile	His	
225					230					235					

<210> 57
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 57
 Asn Asp Asn Val Thr Ile Phe Cys Asn Ile Phe Tyr Ser Gln Pro Leu
 1 5 10 15
 Asn Ile Thr Ser Met Gly Ile Thr Trp Phe Trp Lys Ser Leu Thr Phe
 20 25 30
 Asp Lys Glu Val Lys Val Phe Glu Phe Gly Asp His Gln Glu Ala
 35 40 45
 Phe Arg Pro Gly Ala Ile Val Ser Pro Trp Arg Leu Lys Ser Gly Asp
 50 55 60
 Ala Ser Leu Arg Leu Pro Gly Ile Gln Leu Glu Glu Ala Gly Glu Tyr
 65 70 75 80
 Arg Cys Glu Val

<210> 58
 <211> 68
 <212> PRT
 <213> Homo sapiens

<400> 58
 Cys Glu Ser Ser Gly Phe Tyr Pro Glu Ala Ile Asn Ile Thr Trp Glu
 1 5 10 15
 Lys Gln Thr Gln Lys Phe Pro His Pro Ile Glu Ile Ser Glu Asp Val
 20 25 30
 Ile Thr Gly Pro Thr Ile Lys Asn Met Asp Gly Thr Phe Asn Val Thr
 35 40 45
 Ser Cys Leu Lys Leu Asn Ser Ser Gln Glu Asp Pro Gly Thr Val Tyr
 50 55 60
 Gln Cys Val Val
 65

<210> 59
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 59
 Trp Trp Pro Ile Ser Phe Ile Gly Val Gly Leu Val Leu Leu Ile Val
 1 5 10 15
 Leu Ile

<210> 60
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 60

Pro	Trp	Lys	Lys	Val	Arg	Gly	Ser	Lys	Ala	Lys	Phe	Ser	Pro	Val	Ser
1				5					10					15	
Trp	Ala	Ser	Lys	Lys	Leu	Leu	Glu	Gln	Leu	Leu	Pro	Thr	Leu	Gln	Ala
		20						25					30		
Ser	Arg	Asp	Arg	Pro	Ala	Gly	Lys	Asp	Phe	Val	Ser	Pro	Ser	Ser	Pro
		35					40					45			
Ser	Gly	Val	Gly	Asn	Val	Gly	Cys	Val	Pro	Ile	Gln	Phe	Pro	Ile	Thr
	50					55					60				
Glu	Asp	Leu	Ala	Val	Thr	Tyr	His	Leu	Thr	Ser	Val	Trp	Trp	Phe	Val
65					70					75					80
Thr	Leu	Gly													

<210> 61
 <211> 1402
 <212> DNA
 <213> Homo sapiens

<400> 61

gaagttgaag	tgaagtttta	ataagcaaaa	gaagaaagca	ctccactgca	gagagggggc	60
ccaaaagagg	ggttgccattt	cacagctgaa	tacaaaggca	taaggcacac	atttctggta	120
gctccacccc	atcctcgtag	tgtgcatgca	agcccttagc	ttgagttact	ccatgtggct	180
ttgttccctt	tactgtgcat	gtgtcagggg	atggaatttt	ctattgtgag	catgtctagg	240
caagtctcct	gtgtagcctt	gttttaatgt	atgtggctgt	gggcatgttt	taggcaagcc	300
cccctgtaca	agttccctta	tctgcagttt	gatttttcag	gctgttcttt	tgtttgaagg	360
aatttgactg	agggcccacc	ctaactgcct	gcctgactag	tttcttcctt	cctcctctct	420
caatagcacc	tgaatatcag	aaccagagaa	aggcaagaaa	tatgacaaca	gtcacaaata	480
ccacaagaaa	catttgaaaa	ccacttttta	tccagttttc	tcatggccta	gatccaacag	540
gaataagtcc	cgtgaatcta	aatggccaac	tttagataaa	gggccatttt	tcttaattga	600
ctgattatct	cacttctcct	aaattattta	taatgagatg	tactggctgt	tgtgcagatt	660
ttgccttgac	aggcccataa	ataattgagg	gcccttttat	tatctaaaac	tattttaacc	720
aacacattta	cataggctct	ttgggcctct	aaagcttgag	ctgtttttatt	tactattttg	780
gccatagtca	gggataaaaa	tgtttagaaa	catgttttag	tttagaaata	cctagtgagg	840
gttagaaatt	cttagtcaaa	ctagtgagat	ctgggtggtc	gttattgatc	agataaaaata	900
tgaggaattc	ccctctctaa	gccatagttt	ctaaatgtgt	gagaaaaaca	agcagtccac	960
acatagttca	gggcctggtc	tgaacactaa	agtctggttc	attcacagag	atataatact	1020
tgtttagtat	ggagaaagag	agggaggctt	tacaacacat	caccccagag	tcacaaacca	1080
ccatacagag	gtcagatggt	atgtgacagc	taggtcctct	gtgataggaa	actggattgg	1140
aacacagcca	acattcccaa	cacctgatgg	tgaagaggga	ctgacaaagt	cctttccagc	1200
aggcctgtcc	cttgaggctt	gtaagggttg	cagcagctgc	tctaaaagct	ttttactagc	1260
ccaagacaca	gggctgaact	ttgctttgga	gcccttacc	tttttccaag	gaatcaaaac	1320
aattaataaa	accagtccaa	caccaatgaa	tgaaataggc	caccaatgaa	tggaataaatt	1380
atctgtcttc	tcagtttctg	ca				1402

<210> 62
 <220>
 <223> Unknown

<400> 62
 000

<210> 63
 <220>
 <223> Unknown

<400> 63
000
<210> 64
<220>
<223> Unknown
<400> 64
000
<210> 65
<220>
<223> Unknown
<400> 65
000
<210> 66
<220>
<223> Unknown
<400> 66
000
<210> 67
<220>
<223> Unknown
<400> 67
000
<210> 68
<220>
<223> Unknown
<400> 68
000
<210> 69
<220>
<223> Unknown
<400> 69
000
<210> 70
<220>
<223> Unknown

<400> 70
000

<210> 71
<211> 3594
<212> DNA
<213> Homo sapiens

<400> 71
ggccccgggca gctgcggctc gggatccgtc gaggggaggc cgagcttgcc aagctggcgc 60
ccagcgggggt catggtgccc ggcgcccgcg gcggcggcgc actggcgcgg gctgccgggc 120
ggggcctcct ggctttgtcg ctgcgggtct ccgcccgcct ccggctgcag gcggaggagc 180
tgggtgatgg ctgtggacac ctagtgaact atcaggatag tggcacaatg acatctaaga 240
attatccccg gacctacccc aatcacactg tttgcgaaaa gacaattaca gtaccaaagg 300
ggaaaagact gattctgagg ttgggagatt tggatatcga atcccagacc tgtgcttctg 360
actatcttct cttcaccagc tcttcagatc aatatgggtc atactgtgga agtatgactg 420
ttcccaaaga actcttggtg aacacaagtg aagtaaccgt ccgctttgag agtggatccc 480
acattttctg ccgggggtttt ttgctgacct atgcgagcag cgaccatcca gatttaataa 540
catgttttga acgagctagc cattatttga agacagaata cagcaaattc tgcccagctg 600
gttgtagaga cgtagcagga gacatttctg ggaatatggt agatggatat agagatacct 660
ctttattgtg caaagctgcc atccatgcag gatatgaagg gattctggcc aatgggtgtc 720
tcagtgtgct tcagcgcaaa gggatcagtc gatatgaagg gattctggcc aatgggtgtc 780
tttcgaggga tggttccctg tcagacaagc gatttctgtt tacctccaat ggttgcagca 840
gaccttgtag ttttgaacct gacgggcaaa tcagagcttc ttcctcatgg cagtcgggtc 900
atgagagtgg agaccaagtt cactggtctc ctggccaagc ccgacttcag gaccaaggcc 960
catcatgggc ttcgggcgac agtagcaaca accacaaacc acgagagtgg ctggagatcg 1020
at ttgggggga gaaaaagaaa ataacaggaa ttaggaccac aggatctaca cagtcgaact 1080
tcaactttta tgttaagagt tttgtgatga acttcaaaaa caataattct aagtggaaga 1140
cctataaagg aattgtgaat aatgaagaaa aggtgtttca gggtaactct aactttcggg 1200
accagtgca aaacaatttc atccctccca tcgtggccag atatgtgcgg gttgtccccc 1260
agacatggca ccagaggata gccttgaagg tggagctcat tggttgccag attacacaag 1320
gtaatgattc attggtgtgg cgcaagacaa gtcaaagcac cagtgtttca actaagaaag 1380
aagatgagac aatcacaagg cccatcccc ctggaagaaac atccacagga ataaacatta 1440
caacgggtggc tattccattg gtgctccttg ttgtcctggt gtttgctgga atggggatct 1500
ttgcagcctt tagaaagaag aagaagaaa gaagtcctga tggatcagca gaggctcaga 1560
aaacagactg ttggaagcag attaaatatc cctttgccag acatcagtc gctgagttta 1620
ccatcagcta tgataatgag aaggagatga caaaaagtt agatctcatc acaagtata 1680
tggcagatta ccagcagccc ctcatgattg gcaccgggac agtcacgagg aagggtccca 1740
ccttcggccc catggacacg gatgccgagg aggcaggggt gagcaccgat gccggcgccc 1800
actatgactg cccgcagcgg gccggccgcc acgagtagcg gctgcccctg gcgccccgg 1860
agcccagata cgccacgccc atcgtggagc ggcacgtgct gcgcgcccac acgttctctg 1920
cgagagcgg ctaccgcgtc ccaggggccc agcccggcca caaacactcc ctctcctcgg 1980
gcggetttct ccccgtagcg ggtgtgggcg ccaggacgg agactatcaa aggccacaca 2040
gcgcacagcc tgcggacagc ggctacgacc ggcccaaagc tgtcagcgcc ctgcgccacc 2100
aaagcgggaca ccctgactct cagaagcccc caacgcattc cgggacgagt gacagctatt 2160
ctgccccag agactgcctc acacccctca accagacggc catgactgcc cttttgtgaa 2220
cacaatgtga aagaagctga ctgtggtaact gagcgtcggg ctgtcacaag gcactggaag 2280
aagggaacct gctggtccag agtgtgcgtg tgtatcgggt tgtgtgtaca cttgcattgt 2340
tgtgtgtgat ccagtaggat cctagagaca acctgtcata ctgtttacaa aattgtgcag 2400
ctggtttctg gctgacctt aggggtgcgtc tgttgggttt tgttgggcta gaaaaatgaa 2460
aattttttaga tggcggtttt attcctctga ctgatattga gctgctttgg tgttaaagg 2520
gtaatgtgta cagagttgta ttttaacaata ataaaagtaa ctttaagttt ctctatcaga 2580
tttttagttc gcacagaggt taagtgggaa aatgcagctg ttgcaaaatg tatataaata 2640
gtatgttcat ttttttcagt atattatctg atactgtgtt agcagcaggt ctgcttaaac 2700
ctagtcttgt tgttattgag tcatttcctc tcctttgata actagaactg aaagcatttt 2760
taacattctt ctcttggaag aaatgaatta ctgaagcat gaaaagcaca ccagggtggt 2820

tggtttatttta	gcaatttatga	ctgtagatttt	aaaaacaagc	aaagaaacaa	cacctcagca	2880
gctgcccgtt	tccttagtct	ccacttcaga	gggggatgcg	aagaggtcgg	cccagctccg	2940
gtgaccatga	aggtggcaca	ggaattacag	tgtgaatggc	tgtgtcagat	gttttcgtac	3000
ctcagattaa	aaatattgct	gaggtcagac	gccacaattt	tcatgacttt	cttcagaagt	3060
agcacatttt	cgtgacttcc	gctgtcctct	gaaaaacaaa	gttatttgga	acatgttcat	3120
gcaaaagtga	ttctgaccaa	gtctaaatcg	agcttttcta	ctgacatgaa	actgttgga	3180
actgatctca	ttttataaga	aatgattttc	ccctcaagga	ggcgtctgta	attccagaac	3240
agtccagaca	tcagctgtac	ctcatgctca	gtagttttta	tttgagtttc	ttttgtgagt	3300
taactatggg	agatttaacc	tcttttgcca	aagagggaag	tgtgtgtgtt	tttttaatag	3360
aaaatatgga	ccaaaaattt	ttttccctga	agaatgtatt	ataaccctat	ttgtgtgggt	3420
attacatcct	gtgaaatgta	tatatgttaa	aataatgggg	gtgctggaag	gtcatggcag	3480
actagctgct	ggttagtgtg	gaggggaagt	ggtttacttt	gtagagttta	catggtttta	3540
tgcgcacact	aattgtaata	aactatgcca	aaccaataa	aaaaaaaaa	aaaa	3594

<210> 72

<211> 2145

<212> DNA

<213> Homo sapiens

<400> 72

atggtgcccc	gcgccccg	cgggcgcgca	ctggcgcg	ctgccccg	gggcctcctg	60
gctttgctgc	tcgcggtctc	cgccccgctc	cggtgagc	cggaggagct	gggtgatggc	120
tgtggacacc	tagtgactta	tcaggatagt	ggcacaatga	catctaagaa	ttatccccgg	180
acctacccca	atcacactgt	ttgcgaaaag	acaattacag	taccaaaggg	gaaaagactg	240
attctgaggt	tgggagattt	ggatatcgaa	tcacagacct	gtgcttctga	ctatcttctc	300
ttcaccagct	cttcagatca	atatggtcca	tactgtggaa	gtatgactgt	tcccaaagaa	360
ctcttggtga	acacaagtga	agtaaccgtc	cgctttgaga	gtggatccca	catttctggc	420
cgggggtttt	tgctgaccta	tgcgagcagc	gaccatccag	atttaataac	atgtttggaa	480
cgagctagcc	attatttgaa	gacagaatac	agcaaattct	gcccagctgg	ttgtagagac	540
gtagcaggag	acattttctg	gaatatggta	gatggatata	gagataacct	tttattgtgc	600
aaagctgcca	tccatgcagg	aataattgct	gatgaactag	gtggccagat	cagtgtgctt	660
cagcgcaaag	ggatcagtcg	atatgaaggg	attctggcca	atggtgttct	ttcgagggat	720
ggttcctgt	cagacaagcg	atttctgttt	acctccaatg	gttgacagcag	atccttgagt	780
tttgaacctg	acgggcaa	cagagcttct	tcctcatggc	agtcggtcaa	tgagagtggg	840
gaccaagtcc	actggtctcc	tggccaagcc	cgacttcagg	accaaggccc	atcatgggct	900
tcgggcgaca	gtagcaacaa	ccacaaacca	cgagagtggc	tggagatcga	tttgggggag	960
aaaaagaaaa	taacaggaat	taggaccaca	ggatctacac	agtcgaactt	caacttttat	1020
gttaagagtt	ttgtgatgaa	cttcaaaaac	aataattcta	agtggaaagc	ctataaagga	1080
attgtgaata	atgaagaaaa	ggtgtttcag	ggtaactcta	actttcggga	cccagtgc	1140
aacaatttca	tccctcccat	cgtggccaga	tatgtgcggg	ttgtcccca	gacatggcac	1200
cagaggatag	ccttgaaggt	ggagctcatt	ggttgccaga	ttacacaagg	taatgattca	1260
ttggtgtggc	gcaagacaag	tcaaagcacc	agtgtttcaa	ctaagaaaga	agatgagaca	1320
atcacaaggc	ccatcccctc	ggaagaaaca	tccacaggaa	taaacattac	aacggtggct	1380
attccattgg	tgctccttgt	tgtcctggtg	tttgctggaa	tggggatctt	tgagccttt	1440
agaaagaaga	agaagaaaag	aagtcctgat	ggatcagcag	aggctcagaa	aacagactgt	1500
tggaagcaga	ttaaataatcc	ctttgccaga	catcagtcag	ctgagtttac	catcagctat	1560
gataatgaga	aggagatgac	acaaaagtta	gatctcatca	caagtgatat	ggcagattac	1620
cagcagcccc	tcatgattgg	caccgggaca	gtcacaggga	agggctccac	cttccggccc	1680
atggacacgg	atgccgagg	ggcagggtg	agcacgatg	ccggcgcca	ctatgactgc	1740
ccgcagcggg	ccggccgcca	cgagtacg	ctgcccctgg	cgcccccgga	gcccagtagc	1800
gccacgcca	tcgtggagcg	gcacgtgctg	cgcgcccaca	cgttctctgc	gcagagcggc	1860
taccgcgtcc	cagggcccca	gcccggccac	aaacactccc	tctcctcggg	cggttctctc	1920
cccgtagcgg	gtgtgggcgc	ccaggacgga	gactatcaaa	ggccacacag	cgcacagcct	1980
gcggacaggg	gctacgaccg	gcccacagct	gtcagcgccc	tcgccaccga	aagcggacac	2040
cctgactctc	agaagcccc	aacgcattcc	gggacgagtg	acagctattc	tgcccccaga	2100
gactgcctca	caccctcaa	ccagacggcc	atgactgccc	ttttg		2145

<210> 73
 <211> 715
 <212> PRT
 <213> Homo sapiens

<400> 73

Met	Val	Pro	Gly	Ala	Arg	Gly	Gly	Gly	Ala	Leu	Ala	Arg	Ala	Ala	Gly
1				5					10					15	
Arg	Gly	Leu	Leu	Ala	Leu	Leu	Leu	Ala	Val	Ser	Ala	Pro	Leu	Arg	Leu
			20					25					30		
Gln	Ala	Glu	Glu	Leu	Gly	Asp	Gly	Cys	Gly	His	Leu	Val	Thr	Tyr	Gln
		35					40					45			
Asp	Ser	Gly	Thr	Met	Thr	Ser	Lys	Asn	Tyr	Pro	Gly	Thr	Tyr	Pro	Asn
	50					55					60				
His	Thr	Val	Cys	Glu	Lys	Thr	Ile	Thr	Val	Pro	Lys	Gly	Lys	Arg	Leu
65					70					75					80
Ile	Leu	Arg	Leu	Gly	Asp	Leu	Asp	Ile	Glu	Ser	Gln	Thr	Cys	Ala	Ser
				85					90					95	
Asp	Tyr	Leu	Leu	Phe	Thr	Ser	Ser	Ser	Asp	Gln	Tyr	Gly	Pro	Tyr	Cys
			100					105					110		
Gly	Ser	Met	Thr	Val	Pro	Lys	Glu	Leu	Leu	Leu	Asn	Thr	Ser	Glu	Val
		115					120					125			
Thr	Val	Arg	Phe	Glu	Ser	Gly	Ser	His	Ile	Ser	Gly	Arg	Gly	Phe	Leu
						135					140				
Leu	Thr	Tyr	Ala	Ser	Ser	Asp	His	Pro	Asp	Leu	Ile	Thr	Cys	Leu	Glu
145					150					155					160
Arg	Ala	Ser	His	Tyr	Leu	Lys	Thr	Glu	Tyr	Ser	Lys	Phe	Cys	Pro	Ala
				165					170					175	
Gly	Cys	Arg	Asp	Val	Ala	Gly	Asp	Ile	Ser	Gly	Asn	Met	Val	Asp	Gly
			180					185					190		
Tyr	Arg	Asp	Thr	Ser	Leu	Leu	Cys	Lys	Ala	Ala	Ile	His	Ala	Gly	Ile
		195					200					205			
Ile	Ala	Asp	Glu	Leu	Gly	Gly	Gln	Ile	Ser	Val	Leu	Gln	Arg	Lys	Gly
		210				215					220				
Ile	Ser	Arg	Tyr	Glu	Gly	Ile	Leu	Ala	Asn	Gly	Val	Leu	Ser	Arg	Asp
225					230					235					240
Gly	Ser	Leu	Ser	Asp	Lys	Arg	Phe	Leu	Phe	Thr	Ser	Asn	Gly	Cys	Ser
				245					250					255	
Arg	Ser	Leu	Ser	Phe	Glu	Pro	Asp	Gly	Gln	Ile	Arg	Ala	Ser	Ser	Ser
			260					265					270		
Trp	Gln	Ser	Val	Asn	Glu	Ser	Gly	Asp	Gln	Val	His	Trp	Ser	Pro	Gly
			275				280					285			
Gln	Ala	Arg	Leu	Gln	Asp	Gln	Gly	Pro	Ser	Trp	Ala	Ser	Gly	Asp	Ser
		290				295					300				
Ser	Asn	Asn	His	Lys	Pro	Arg	Glu	Trp	Leu	Glu	Ile	Asp	Leu	Gly	Glu
305					310					315					320
Lys	Lys	Lys	Ile	Thr	Gly	Ile	Arg	Thr	Thr	Gly	Ser	Thr	Gln	Ser	Asn
				325					330					335	
Phe	Asn	Phe	Tyr	Val	Lys	Ser	Phe	Val	Met	Asn	Phe	Lys	Asn	Asn	Asn
			340					345					350		
Ser	Lys	Trp	Lys	Thr	Tyr	Lys	Gly	Ile	Val	Asn	Asn	Glu	Glu	Lys	Val
			355				360					365			
Phe	Gln	Gly	Asn	Ser	Asn	Phe	Arg	Asp	Pro	Val	Gln	Asn	Asn	Phe	Ile
		370				375					380				
Pro	Pro	Ile	Val	Ala	Arg	Tyr	Val	Arg	Val	Val	Pro	Gln	Thr	Trp	His
385					390					395					400

Gln	Arg	Ile	Ala	Leu	Lys	Val	Glu	Leu	Ile	Gly	Cys	Gln	Ile	Thr	Gln
				405					410						415
Gly	Asn	Asp	Ser	Leu	Val	Trp	Arg	Lys	Thr	Ser	Gln	Ser	Thr	Ser	Val
			420					425					430		
Ser	Thr	Lys	Lys	Glu	Asp	Glu	Thr	Ile	Thr	Arg	Pro	Ile	Pro	Ser	Glu
		435					440					445			
Glu	Thr	Ser	Thr	Gly	Ile	Asn	Ile	Thr	Thr	Val	Ala	Ile	Pro	Leu	Val
	450					455					460				
Leu	Leu	Val	Val	Leu	Val	Phe	Ala	Gly	Met	Gly	Ile	Phe	Ala	Ala	Phe
465					470					475					480
Arg	Lys	Lys	Lys	Lys	Lys	Gly	Ser	Pro	Tyr	Gly	Ser	Ala	Glu	Ala	Gln
			485						490						495
Lys	Thr	Asp	Cys	Trp	Lys	Gln	Ile	Lys	Tyr	Pro	Phe	Ala	Arg	His	Gln
		500						505					510		
Ser	Ala	Glu	Phe	Thr	Ile	Ser	Tyr	Asp	Asn	Glu	Lys	Glu	Met	Thr	Gln
	515						520					525			
Lys	Leu	Asp	Leu	Ile	Thr	Ser	Asp	Met	Ala	Asp	Tyr	Gln	Gln	Pro	Leu
	530					535					540				
Met	Ile	Gly	Thr	Gly	Thr	Val	Thr	Arg	Lys	Gly	Ser	Thr	Phe	Arg	Pro
545					550					555					560
Met	Asp	Thr	Asp	Ala	Glu	Glu	Ala	Gly	Val	Ser	Thr	Asp	Ala	Gly	Gly
			565						570						575
His	Tyr	Asp	Cys	Pro	Gln	Arg	Ala	Gly	Arg	His	Glu	Tyr	Ala	Leu	Pro
		580						585					590		
Leu	Ala	Pro	Pro	Glu	Pro	Glu	Tyr	Ala	Thr	Pro	Ile	Val	Glu	Arg	His
	595						600					605			
Val	Leu	Arg	Ala	His	Thr	Phe	Ser	Ala	Gln	Ser	Gly	Tyr	Arg	Val	Pro
	610					615					620				
Gly	Pro	Gln	Pro	Gly	His	Lys	His	Ser	Leu	Ser	Ser	Gly	Gly	Phe	Ser
625					630					635					640
Pro	Val	Ala	Gly	Val	Gly	Ala	Gln	Asp	Gly	Asp	Tyr	Gln	Arg	Pro	His
			645						650						655
Ser	Ala	Gln	Pro	Ala	Asp	Arg	Gly	Tyr	Asp	Arg	Pro	Lys	Ala	Val	Ser
	660							665					670		
Ala	Leu	Ala	Thr	Glu	Ser	Gly	His	Pro	Asp	Ser	Gln	Lys	Pro	Pro	Thr
	675						680					685			
His	Pro	Gly	Thr	Ser	Asp	Ser	Tyr	Ser	Ala	Pro	Arg	Asp	Cys	Leu	Thr
	690				695					700					
Pro	Leu	Asn	Gln	Thr	Ala	Met	Thr	Ala	Leu	Leu					
705					710					715					

<210> 74
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 74
 Met Val Pro Gly Ala Arg Gly Gly Gly Ala Leu Ala Arg Ala Ala Gly
 1 5 10 15
 Arg Gly Leu Leu Ala Leu Leu Leu Ala Val Ser Ala Pro Leu Arg Leu
 20 25 30
 Gln Ala

<210> 75

<211> 681
 <212> PRT
 <213> Homo sapiens

<400> 75

Glu	Glu	Leu	Gly	Asp	Gly	Cys	Gly	His	Leu	Val	Thr	Tyr	Gln	Asp	Ser
1				5					10					15	
Gly	Thr	Met	Thr	Ser	Lys	Asn	Tyr	Pro	Gly	Thr	Tyr	Pro	Asn	His	Thr
			20					25					30		
Val	Cys	Glu	Lys	Thr	Ile	Thr	Val	Pro	Lys	Gly	Lys	Arg	Leu	Ile	Leu
		35				40					45				
Arg	Leu	Gly	Asp	Leu	Asp	Ile	Glu	Ser	Gln	Thr	Cys	Ala	Ser	Asp	Tyr
	50				55						60				
Leu	Leu	Phe	Thr	Ser	Ser	Ser	Asp	Gln	Tyr	Gly	Pro	Tyr	Cys	Gly	Ser
65				70						75					80
Met	Thr	Val	Pro	Lys	Glu	Leu	Leu	Leu	Asn	Thr	Ser	Glu	Val	Thr	Val
				85					90					95	
Arg	Phe	Glu	Ser	Gly	Ser	His	Ile	Ser	Gly	Arg	Gly	Phe	Leu	Leu	Thr
			100					105					110		
Tyr	Ala	Ser	Ser	Asp	His	Pro	Asp	Leu	Ile	Thr	Cys	Leu	Glu	Arg	Ala
	115						120					125			
Ser	His	Tyr	Leu	Lys	Thr	Glu	Tyr	Ser	Lys	Phe	Cys	Pro	Ala	Gly	Cys
	130					135					140				
Arg	Asp	Val	Ala	Gly	Asp	Ile	Ser	Gly	Asn	Met	Val	Asp	Gly	Tyr	Arg
145					150					155					160
Asp	Thr	Ser	Leu	Leu	Cys	Lys	Ala	Ala	Ile	His	Ala	Gly	Ile	Ile	Ala
				165					170					175	
Asp	Glu	Leu	Gly	Gly	Gln	Ile	Ser	Val	Leu	Gln	Arg	Lys	Gly	Ile	Ser
		180						185					190		
Arg	Tyr	Glu	Gly	Ile	Leu	Ala	Asn	Gly	Val	Leu	Ser	Arg	Asp	Gly	Ser
	195						200					205			
Leu	Ser	Asp	Lys	Arg	Phe	Leu	Phe	Thr	Ser	Asn	Gly	Cys	Ser	Arg	Ser
	210					215					220				
Leu	Ser	Phe	Glu	Pro	Asp	Gly	Gln	Ile	Arg	Ala	Ser	Ser	Ser	Trp	Gln
225					230					235					240
Ser	Val	Asn	Glu	Ser	Gly	Asp	Gln	Val	His	Trp	Ser	Pro	Gly	Gln	Ala
				245					250					255	
Arg	Leu	Gln	Asp	Gln	Gly	Pro	Ser	Trp	Ala	Ser	Gly	Asp	Ser	Ser	Asn
			260					265					270		
Asn	His	Lys	Pro	Arg	Glu	Trp	Leu	Glu	Ile	Asp	Leu	Gly	Glu	Lys	Lys
		275					280					285			
Lys	Ile	Thr	Gly	Ile	Arg	Thr	Thr	Gly	Ser	Thr	Gln	Ser	Asn	Phe	Asn
	290					295					300				
Phe	Tyr	Val	Lys	Ser	Phe	Val	Met	Asn	Phe	Lys	Asn	Asn	Asn	Ser	Lys
305					310					315					320
Trp	Lys	Thr	Tyr	Lys	Gly	Ile	Val	Asn	Asn	Glu	Glu	Lys	Val	Phe	Gln
				325					330					335	
Gly	Asn	Ser	Asn	Phe	Arg	Asp	Pro	Val	Gln	Asn	Asn	Phe	Ile	Pro	Pro
			340					345					350		
Ile	Val	Ala	Arg	Tyr	Val	Arg	Val	Val	Pro	Gln	Thr	Trp	His	Gln	Arg
		355					360					365			
Ile	Ala	Leu	Lys	Val	Glu	Leu	Ile	Gly	Cys	Gln	Ile	Thr	Gln	Gly	Asn
	370					375					380				
Asp	Ser	Leu	Val	Trp	Arg	Lys	Thr	Ser	Gln	Ser	Thr	Ser	Val	Ser	Thr
385					390					395					400
Lys	Lys	Glu	Asp	Glu	Thr	Ile	Thr	Arg	Pro	Ile	Pro	Ser	Glu	Glu	Thr
				405					410					415	

Ser	Thr	Gly	Ile	Asn	Ile	Thr	Thr	Val	Ala	Ile	Pro	Leu	Val	Leu	Leu
			420					425					430		
Val	Val	Leu	Val	Phe	Ala	Gly	Met	Gly	Ile	Phe	Ala	Ala	Phe	Arg	Lys
		435					440					445			
Lys	Lys	Lys	Lys	Gly	Ser	Pro	Tyr	Gly	Ser	Ala	Glu	Ala	Gln	Lys	Thr
	450					455					460				
Asp	Cys	Trp	Lys	Gln	Ile	Lys	Tyr	Pro	Phe	Ala	Arg	His	Gln	Ser	Ala
465					470					475					480
Glu	Phe	Thr	Ile	Ser	Tyr	Asp	Asn	Glu	Lys	Glu	Met	Thr	Gln	Lys	Leu
				485					490					495	
Asp	Leu	Ile	Thr	Ser	Asp	Met	Ala	Asp	Tyr	Gln	Gln	Pro	Leu	Met	Ile
			500					505					510		
Gly	Thr	Gly	Thr	Val	Thr	Arg	Lys	Gly	Ser	Thr	Phe	Arg	Pro	Met	Asp
		515					520					525			
Thr	Asp	Ala	Glu	Glu	Ala	Gly	Val	Ser	Thr	Asp	Ala	Gly	Gly	His	Tyr
	530					535					540				
Asp	Cys	Pro	Gln	Arg	Ala	Gly	Arg	His	Glu	Tyr	Ala	Leu	Pro	Leu	Ala
545					550					555					560
Pro	Pro	Glu	Pro	Glu	Tyr	Ala	Thr	Pro	Ile	Val	Glu	Arg	His	Val	Leu
				565					570					575	
Arg	Ala	His	Thr	Phe	Ser	Ala	Gln	Ser	Gly	Tyr	Arg	Val	Pro	Gly	Pro
			580					585					590		
Gln	Pro	Gly	His	Lys	His	Ser	Leu	Ser	Ser	Gly	Gly	Phe	Ser	Pro	Val
		595					600					605			
Ala	Gly	Val	Gly	Ala	Gln	Asp	Gly	Asp	Tyr	Gln	Arg	Pro	His	Ser	Ala
	610					615				620					
Gln	Pro	Ala	Asp	Arg	Gly	Tyr	Asp	Arg	Pro	Lys	Ala	Val	Ser	Ala	Leu
625					630					635					640
Ala	Thr	Glu	Ser	Gly	His	Pro	Asp	Ser	Gln	Lys	Pro	Pro	Thr	His	Pro
				645					650					655	
Gly	Thr	Ser	Asp	Ser	Tyr	Ser	Ala	Pro	Arg	Asp	Cys	Leu	Thr	Pro	Leu
			660					665					670		
Asn	Gln	Thr	Ala	Met	Thr	Ala	Leu	Leu							
		675					680								

<210> 76
 <211> 421
 <212> PRT
 <213> Homo sapiens

<400> 76

Glu	Glu	Leu	Gly	Asp	Gly	Cys	Gly	His	Leu	Val	Thr	Tyr	Gln	Asp	Ser
1				5					10					15	
Gly	Thr	Met	Thr	Ser	Lys	Asn	Tyr	Pro	Gly	Thr	Tyr	Pro	Asn	His	Thr
			20					25					30		
Val	Cys	Glu	Lys	Thr	Ile	Thr	Val	Pro	Lys	Gly	Lys	Arg	Leu	Ile	Leu
	35						40					45			
Arg	Leu	Gly	Asp	Leu	Asp	Ile	Glu	Ser	Gln	Thr	Cys	Ala	Ser	Asp	Tyr
	50					55					60				
Leu	Leu	Phe	Thr	Ser	Ser	Ser	Asp	Gln	Tyr	Gly	Pro	Tyr	Cys	Gly	Ser
65					70					75					80
Met	Thr	Val	Pro	Lys	Glu	Leu	Leu	Leu	Asn	Thr	Ser	Glu	Val	Thr	Val
				85					90					95	
Arg	Phe	Glu	Ser	Gly	Ser	His	Ile	Ser	Gly	Arg	Gly	Phe	Leu	Leu	Thr
			100					105					110		
Tyr	Ala	Ser	Ser	Asp	His	Pro	Asp	Leu	Ile	Thr	Cys	Leu	Glu	Arg	Ala

<400> 78

```
Arg Lys Lys Lys Lys Lys Gly Ser Pro Tyr Gly Ser Ala Glu Ala Gln
 1          5          10          15
Lys Thr Asp Cys Trp Lys Gln Ile Lys Tyr Pro Phe Ala Arg His Gln
 20          25          30
Ser Ala Glu Phe Thr Ile Ser Tyr Asp Asn Glu Lys Glu Met Thr Gln
 35          40          45
Lys Leu Asp Leu Ile Thr Ser Asp Met Ala Asp Tyr Gln Gln Pro Leu
 50          55          60
Met Ile Gly Thr Gly Thr Val Thr Arg Lys Gly Ser Thr Phe Arg Pro
 65          70          75
Met Asp Thr Asp Ala Glu Glu Ala Gly Val Ser Thr Asp Ala Gly Gly
 85          90          95
His Tyr Asp Cys Pro Gln Arg Ala Gly Arg His Glu Tyr Ala Leu Pro
100          105          110
Leu Ala Pro Pro Glu Pro Glu Tyr Ala Thr Pro Ile Val Glu Arg His
115          120          125
Val Leu Arg Ala His Thr Phe Ser Ala Gln Ser Gly Tyr Arg Val Pro
130          135          140
Gly Pro Gln Pro Gly His Lys His Ser Leu Ser Ser Gly Gly Phe Ser
145          150          155
Pro Val Ala Gly Val Gly Ala Gln Asp Gly Asp Tyr Gln Arg Pro His
165          170          175
Ser Ala Gln Pro Ala Asp Arg Gly Tyr Asp Arg Pro Lys Ala Val Ser
180          185          190
Ala Leu Ala Thr Glu Ser Gly His Pro Asp Ser Gln Lys Pro Pro Thr
195          200          205
His Pro Gly Thr Ser Asp Ser Tyr Ser Ala Pro Arg Asp Cys Leu Thr
210          215          220
Pro Leu Asn Gln Thr Ala Met Thr Ala Leu Leu
225          230          235
```

<210> 79

<220>

<223> Unknown

<400> 79

000

<210> 80

<220>

<223> Unknown

<400> 80

000

<210> 81

<211> 4074

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(4074)
 <223> n = A,T,C or G

<400> 81

gtgggtcgcg	ccgaggtgag	actgtgaaga	aggaagaacg	ttgcttgggc	aaaaggagca	60
tattctcagg	agacggggcc	cctgcctgcc	acaccaagca	ttaggccacc	aggaagaccc	120
ccatctgcaa	gcaagcctag	ccttcagg	agaaagaggc	ccctgcagct	ccttcatcat	180
gaactggcac	atgatcatct	ctgggcttat	tgtggtagt	cttaaagttg	ttggaatgac	240
cttatttcta	ctttatttcc	cacagatttt	taacaaaagt	aacgatggtt	tcaccaccac	300
caggagctat	ggaacagtct	cacagatttt	tgggagcagt	tccccaagtc	ccaacggctt	360
cattaccaca	aggagctatg	gaacagtctg	ccccaagac	tgggaatttt	atcaagcaag	420
atgttttttc	ttatccactt	ctgaatcatc	ttggaatgaa	agcagggact	tttgcaaagg	480
aaaaggatcc	acattggcaa	ttgtcaacac	gccagagaaa	ctgaagtttc	ttcaggacat	540
aactgatgct	gagaagtatt	ttattggctt	aatttaccat	cgtgaagaga	aaagggtggc	600
ttggatcaac	aactctgtgt	tcaatggcaa	tgttaccat	cagaatcaga	atttcaactg	660
tgcgaccatt	ggcctaacaa	agacatttga	tgtgcatca	tgtgacatca	gctaccgcag	720
gatctgtgag	aagaatgcc	aatgatcaca	gttcctgtg	acaagaacta	tacttgcaac	780
tctttttgaa	tccatacagg	tcgtctggcc	aatgattctt	ttacttacct	atctgtctac	840
cagtagcggt	ccttgcccat	ttgggaaact	gagcttcttt	cttctgcact	gggggactgg	900
atgctagcca	tctccaggag	acaggatcag	ttttacggaa	acaactcagt	tagtatagag	960
atgaggtccg	cttctgtagt	actgagcatt	tctgactgat	caaaaaggcc	tagtctgttg	1020
acagggtttg	ttttatttta	gcctcagagt	ataccatact	actagggagt	aactgtagag	1080
tgagaaatta	taaacattat	ttagggatta	ccatggtgga	agagggataa	acatagggtc	1140
tgtgacttcg	tctctgttct	caagggaacc	ccattcacat	gccccctcta	actccacaag	1200
cgagggtagc	agaggctctc	ctcagtctga	actaaggctt	ggccttgggg	agggtccta	1260
gtgctgagct	tggagcagca	cggacagcag	cattgtttat	gggaatggag	agaggtctgg	1320
gcaggatagg	aaccttcttg	gagaccctt	tgaagaaac	caggcagcca	aggagacca	1380
acacactaga	tttctgttct	tcagcaaagc	cctgaagaga	cacttaagct	aaaaattccc	1440
ttgtcatatt	tctgaaactc	cattataaca	tatgtaactc	ctttgtaacc	aaaatttagg	1500
taagcaggct	tcctttgtct	tgaaggtttt	gagtacctgg	ctgtatttgt	tgagtatttt	1560
taaaattttg	gatagtctct	taggcaacaa	taatacaaat	atattcatcc	cttcagttct	1620
ggagaaagcc	tgataccagg	cacagcctac	tgaccccaag	gagcctggca	ctgattggca	1680
tcacattgat	ctagaactgg	tccagccgcc	gaagagtagg	aaaagagaag	ggctgctcag	1740
ggaaacattg	gctgggggca	cgggaataagc	acatagtaaa	aagggaacat	cagggtcaaa	1800
tggaaatcac	ctgagacagg	aaacagggag	ttcatttggc	cacactggaa	gaaaggcaag	1860
aaagaggaag	acaagtcttg	gagtaccctg	gctgttctcc	acactcacia	gacatcagct	1920
atactctgct	tgggtgcataa	gaaagagaaa	agagatgcct	tttgtgtttt	gagtaagaat	1980
aattaaacca	taaggaagac	catgtataaa	actgatggaa	ataatagtca	ccaaagtaca	2040
gcacatacca	ttttgtgtct	aataacaatg	tagcacagta	atgactgtac	atgtcattgt	2100
atgtatacca	aacaagattg	ttgtaaatca	tattttttat	tacaacacta	agttctgtct	2160
ctgcattcct	aggtttctac	atttttggct	ccttagcatg	gccacttaca	attttttaac	2220
atgagataac	acatcagggtg	tcagaacttg	cttgaaggga	attaccagaa	gtaatttgtg	2280
tttgagatgg	ggtggaaatt	ggaattatat	tagtagccgg	tggagataca	agttctctga	2340
ctgtgttggg	aaaggataag	tgctaccgtt	gagaagggaa	gaaaggctga	gtctaggtgg	2400
agaaaaatat	caacagaact	ctagccaaag	gcaagcccca	gaactcagac	aacagaaagg	2460
aaatccta	ccttctgttt	tgagaagaga	gaactgtagt	tgcttcaact	cctatttcat	2520
gacagaataa	ctgcaaactt	ttaagatcag	gaaatgtaga	catctagtga	tttcttttag	2580
agacgttta	atcccccca	agattagtag	acacttctgt	gcaggttcta	aaaggagccc	2640
aatggcctgg	ggtgggagtg	gggagtagat	agggaaatag	tgggatttgg	tttaagttca	2700
tcattgggag	agttcctgga	tccttgcaag	cctagataaa	tgtgatcttt	attagatagc	2760
agtggcatgc	ttttaaaaaa	aaaaggcaat	gaaaatttag	caagccactg	aatttgagtt	2820
ttcactttgt	ttctaataatg	ctgtgtgaat	cagtacagtt	ttcttaccct	ttcttgggtc	2880
taatttcctt	actgataaaa	tggggtagta	atacctatct	caaaaaatta	ttgcacatat	2940
taaataacat	tcctctatgt	atctcaatgg	cattagacat	taggagaagc	attttgtgga	3000
ggatttgaag	ttgagatctt	catccaagaa	gtagcttttc	aatttgctag	aagcttaatg	3060
taggcaagcc	acttcatttt	tcagaacttg	tttactcatt	tataatatgg	gaataaaaaat	3120
ttgtgcaagt	cagagaaggg	tgccttaaaa	atgttgtggc	caagccacat	gagatcaaa	3180

```

acacactttt catgacctca aatgtggggc cagcctaggt cagccaaccc ccatccaacc 3240
cttagactca cgaacaaatc cacctgagat cagcagagcc accctagatc agctgaaact 3300
ctaagcacia aaataaaaaac ttatcactgt aaaaaaaaaa aaaaaaaaaa aagtctctcg 3360
tatagcaaaa tctaactgat gcaatctcca tctggccttc atccttctcc ctttattgtc 3420
ctttcgtgta ttgttcatcc agcaaccagg atgatcttgt taaaacatta aacagattct 3480
gtcaykcttt maaaaaaaaa aaagccatga aattntagca agccactgaa tttgagtttt 3540
cactttgggt tctaatatgc tgtgtgaatc agancagktt tcttaccctt tcttgggtctt 3600
aatttcctta ctgataaaat ggggtwgtaa tacctatctc aaaaaattat tgcacatatt 3660
arataacatt cctctatgta tctcaatggc attagacatt aggagaagca ttttgtggag 3720
gatttgaagt tgagatcttc atccaagaag tagcttttca atttgstaga agcttaatgt 3780
aggcaagcca cttcattttt cagaacttgt ttactcattt ataatatggg aataaaaaatt 3840
tgtgcaagtc agagaagggt gccttaaaaa tgttgtggcc aagccacatg agatcaaaga 3900
cacacttttc atgacctcaa atgtggggcc agcctaggtc agccaacccc catccaaccc 3960
ttagactcac gaacaaatcc acctgagatc agcagagcca ccctagatca gctgaaactc 4020
taagcaciaa aataaaaaact tatcactgta aaaaaaaaaa aaaaaaaaaa agaa 4074

```

```

<210> 82
<211> 564
<212> DNA
<213> Homo sapiens

```

```

<400> 82
atgaactggc acatgatcat ctctgggctt attgtggtag tgcttaaagt tgttgggaatg 60
accttatttc tactttattt cccacagatt tttaacaaaa gtaacgatgg tttcaccacc 120
accaggagct atggaacagt ctcacagatt tttgggagca gttccccaag tcccaacggc 180
ttcattacca caaggagcta tggaacagtc tgccccaag actgggaatt ttatcaagca 240
agatgttttt tcttatccac ttctgaatca tcttgggaatg aaagcaggga cttttgcaaa 300
ggaaaaggat ccacattggc aattgtcaac acgccagaga aactgaagtt tcttcaggac 360
ataactgatg ctgagaagta ttttattggc ttaatttacc atcgtgaaga gaaaagggtg 420
cgttggatca acaactctgt gttcaatggc aatgtttacca atcagaatca gaatttcaac 480
tgtgcgacca ttggcctaac aaagacattt gatgctgcat catgtgacat cagctaccgc 540
aggatctgtg agaagaatgc caaa 564

```

```

<210> 83
<211> 188
<212> PRT
<213> Homo sapiens

```

```

<400> 83
Met Asn Trp His Met Ile Ile Ser Gly Leu Ile Val Val Val Leu Lys
 1           5           10           15
Val Val Gly Met Thr Leu Phe Leu Leu Tyr Phe Pro Gln Ile Phe Asn
 20           25           30
Lys Ser Asn Asp Gly Phe Thr Thr Thr Arg Ser Tyr Gly Thr Val Ser
 35           40           45
Gln Ile Phe Gly Ser Ser Ser Pro Ser Pro Asn Gly Phe Ile Thr Thr
 50           55           60
Arg Ser Tyr Gly Thr Val Cys Pro Lys Asp Trp Glu Phe Tyr Gln Ala
 65           70           75           80
Arg Cys Phe Phe Leu Ser Thr Ser Glu Ser Ser Trp Asn Glu Ser Arg
 85           90           95
Asp Phe Cys Lys Gly Lys Gly Ser Thr Leu Ala Ile Val Asn Thr Pro
100          105          110
Glu Lys Leu Lys Phe Leu Gln Asp Ile Thr Asp Ala Glu Lys Tyr Phe
115          120          125
Ile Gly Leu Ile Tyr His Arg Glu Glu Lys Arg Trp Arg Trp Ile Asn
130          135          140

```

Asn	Ser	Val	Phe	Asn	Gly	Asn	Val	Thr	Asn	Gln	Asn	Gln	Asn	Phe	Asn
145					150					155					160
Cys	Ala	Thr	Ile	Gly	Leu	Thr	Lys	Thr	Phe	Asp	Ala	Ala	Ser	Cys	Asp
				165						170					175
Ile	Ser	Tyr	Arg	Arg	Ile	Cys	Glu	Lys	Asn	Ala	Lys				
			180					185							

<210> 84
 <211> 19
 <212> PRT
 <213> Homo sapiens

Ser	Gly	Leu	Ile	Val	Val	Val	Leu	Lys	Val	Val	Gly	Met	Thr	Leu	Phe
1				5					10					15	
Leu	Leu	Tyr													

<210> 85
 <211> 162
 <212> PRT
 <213> Homo sapiens

Phe	Pro	Gln	Ile	Phe	Asn	Lys	Ser	Asn	Asp	Gly	Phe	Thr	Thr	Thr	Arg
1				5					10					15	
Ser	Tyr	Gly	Thr	Val	Ser	Gln	Ile	Phe	Gly	Ser	Ser	Ser	Pro	Ser	Pro
			20					25					30		
Asn	Gly	Phe	Ile	Thr	Thr	Arg	Ser	Tyr	Gly	Thr	Val	Cys	Pro	Lys	Asp
		35					40					45			
Trp	Glu	Phe	Tyr	Gln	Ala	Arg	Cys	Phe	Phe	Leu	Ser	Thr	Ser	Glu	Ser
	50					55				60					
Ser	Trp	Asn	Glu	Ser	Arg	Asp	Phe	Cys	Lys	Gly	Lys	Gly	Ser	Thr	Leu
65					70					75					80
Ala	Ile	Val	Asn	Thr	Pro	Glu	Lys	Leu	Lys	Phe	Leu	Gln	Asp	Ile	Thr
			85						90					95	
Asp	Ala	Glu	Lys	Tyr	Phe	Ile	Gly	Leu	Ile	Tyr	His	Arg	Glu	Glu	Lys
			100					105					110		
Arg	Trp	Arg	Trp	Ile	Asn	Asn	Ser	Val	Phe	Asn	Gly	Asn	Val	Thr	Asn
		115					120					125			
Gln	Asn	Gln	Asn	Phe	Asn	Cys	Ala	Thr	Ile	Gly	Leu	Thr	Lys	Thr	Phe
	130					135					140				
Asp	Ala	Ala	Ser	Cys	Asp	Ile	Ser	Tyr	Arg	Arg	Ile	Cys	Glu	Lys	Asn
145					150					155					160
Ala	Lys														

<210> 86
 <211> 187
 <212> PRT
 <213> Homo sapiens

Met	Asn	Trp	His	Met	Ile	Ile	Ser	Gly	Leu	Ile	Val	Val	Val	Leu	Lys
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1				5				10					15		
Val	Val	Gly	Met	Thr	Leu	Phe	Leu	Leu	Tyr	Phe	Pro	Gln	Ile	Phe	Asn
			20					25					30		
Lys	Ser	Asn	Asp	Gly	Phe	Thr	Thr	Thr	Arg	Ser	Tyr	Gly	Thr	Val	Ser
		35					40					45			
Gln	Ile	Phe	Gly	Ser	Ser	Ser	Pro	Ser	Pro	Asn	Gly	Phe	Ile	Thr	Thr
	50					55				60					
Arg	Ser	Tyr	Gly	Thr	Val	Cys	Pro	Lys	Asp	Trp	Glu	Phe	Tyr	Gln	Ala
65					70				75					80	
Arg	Cys	Phe	Phe	Leu	Ser	Thr	Ser	Glu	Ser	Ser	Trp	Asn	Glu	Ser	Arg
				85				90					95		
Asp	Phe	Cys	Lys	Gly	Lys	Gly	Ser	Thr	Leu	Ala	Ile	Val	Asn	Thr	Pro
			100					105					110		
Glu	Lys	Leu	Phe	Leu	Gln	Asp	Ile	Thr	Asp	Ala	Glu	Lys	Tyr	Phe	Ile
		115					120					125			
Gly	Leu	Ile	Tyr	His	Arg	Glu	Glu	Lys	Arg	Trp	Arg	Trp	Ile	Asn	Asn
	130					135					140				
Ser	Val	Phe	Asn	Gly	Asn	Val	Thr	Asn	Gln	Asn	Gln	Asn	Phe	Asn	Cys
145					150				155						160
Ala	Thr	Ile	Gly	Leu	Thr	Lys	Thr	Phe	Asp	Ala	Ala	Ser	Cys	Asp	Ile
				165					170					175	
Ser	Tyr	Arg	Arg	Ile	Cys	Glu	Lys	Asn	Ala	Lys					
			180					185							

<210> 87

<220>

<223> Unknown

<400> 87

000

<210> 88

<211> 190

<212> PRT

<213> Homo sapiens

<400> 88

Met	Asn	Trp	His	Met	Ile	Ile	Ser	Gly	Leu	Ile	Val	Val	Val	Ile	Lys
1				5				10						15	
Val	Val	Gly	Met	Thr	Phe	Phe	Leu	Leu	Tyr	Phe	Pro	Gln	Val	Phe	Gly
			20					25					30		
Lys	Ser	Asn	Asp	Gly	Phe	Val	Pro	Thr	Glu	Ser	Tyr	Gly	Thr	Thr	Ser
		35					40					45			
Val	Gln	Asn	Val	Ser	Gln	Ile	Phe	Gly	Arg	Asn	Asp	Glu	Ser	Thr	Met
	50					55				60					
Pro	Thr	Arg	Ser	Tyr	Gly	Thr	Val	Cys	Pro	Arg	Asn	Trp	Asp	Phe	His
65					70				75					80	
Gln	Gly	Lys	Cys	Phe	Phe	Phe	Ser	Phe	Ser	Glu	Ser	Pro	Trp	Lys	Asp
				85				90						95	
Ser	Met	Asp	Tyr	Cys	Ala	Thr	Gln	Gly	Ser	Thr	Leu	Ala	Ile	Val	Asn
			100					105					110		
Thr	Pro	Glu	Lys	Leu	Lys	Tyr	Leu	Gln	Asp	Ile	Ala	Gly	Ile	Glu	Asn
		115					120					125			
Tyr	Phe	Ile	Gly	Leu	Val	Arg	Gln	Pro	Gly	Glu	Lys	Lys	Trp	Arg	Trp
	130					135						140			

Ile	Asn	Asn	Ser	Val	Phe	Asn	Gly	Asn	Val	Thr	Asn	Gln	Asp	Gln	Asn
145					150					155					160
Phe	Asp	Cys	Val	Thr	Ile	Gly	Leu	Thr	Lys	Thr	Tyr	Asp	Ala	Ala	Ser
				165					170					175	
Cys	Glu	Val	Ser	Tyr	Arg	Trp	Ile	Cys	Glu	Met	Asn	Ala	Lys		
			180					185					190		

<210> 89

<220>

<223> Unknown

<400> 89

000

<210> 90

<220>

<223> Unknown

<400> 90

000

<210> 91

<211> 4018

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(4018)

<223> n = A,T,C or G

<400> 91

gtgggtcgcg	ccgaggtgag	actgtgaaga	aggaagaacg	ttgcttgggc	aaaaggagca	60
tattctcagg	agacggggcc	cctgcctgcc	acaccaagca	ttaggccacc	aggaagaccc	120
ccatctgcaa	gcaagcctag	ccttccaggg	agaaagaggc	ccctgcagct	ccttcatcat	180
gaactggcac	atgatcatct	ctgggcttat	tgtggtagt	cttaaagttg	ttggaatgac	240
cttatttcta	ctttatttcc	cacagatttt	taacaaaagt	aacgatggtt	tcaccaccac	300
caggagctat	ggaacagtct	cacagatttt	tgggagcagt	tccccaagtc	ccaacggctt	360
cattaccaca	aggagctatg	gaacagtctg	ccccaagac	tgggaatttt	atcaagcaag	420
atgttttttc	ttatccactt	ctgaatcatc	ttggaatgaa	agcagggact	tttgcaaagg	480
aaaaggatcc	acattggcaa	ttgtcaacac	gccagagaaa	ctgaagtttc	ttcaggacat	540
aactgatgct	gagaagtatt	ttattggctt	aattttaccat	cgtgaagaga	aaaggtggcg	600
ttggatcaac	aactctgtgt	tcaatggcaa	gtacgtgaac	atgccacagt	ttcctgggga	660
tcttggtttg	cttcaaaaaga	ccaaacctga	gattgctggg	ttcaccctgg	aatagctcaa	720
acgctgacac	ttgactctgt	tctgctcttc	tcctttcttc	caaccctatc	attccctatc	780
tgtctaccag	tagcggctct	tgcccatttg	ggaaactgag	cttctttctt	ctgcactggg	840
ggactggatg	ctagccatct	ccaggagaca	ggatcagttt	tacggaaaaca	actcagttag	900
tatagagatg	aggtccgctt	ctgtagtact	gagcatttct	gactgatcaa	aaaggcctag	960
tctgttgaca	gggtttggtt	tatttttagcc	tcagagtata	ccatactact	aggagtaac	1020
tgtagagtga	gaaattataa	acattattta	gggattacca	tgggtggaaga	gggataaaca	1080
taggtcctgt	gacttcgtct	ctgttctcaa	gggaacccca	ttcacatgcc	cctcctaact	1140
ccacaagcga	gggtagcaga	ggctctcctc	agtctgaact	aaggcttggc	cttggggagg	1200
gctcctagt	ctgagcttgg	agcagcacgg	acagcagcat	tgtttatggg	aatggagaga	1260
ggtctgggca	ggataggaac	cttcttggag	acccttttga	agaaaaccag	gcagccaagg	1320

gagccaaaca	cactagattt	ctgttcttca	gcaaagccct	gaagagacac	ttaagctaaa	1380
aattcccttg	tcatatttct	gaaactccat	tataacatat	gtaactcctt	tgtaacccaaa	1440
atntaggtaa	gcaggcttcc	tttgctctga	aggttttgag	tacctggctg	tatttggtga	1500
gtatttttaa	aattttggat	agtctcttag	gcaacaataa	tcacaatata	ttcatccctt	1560
cagttctgga	gaaagcctga	taccaggcac	agcctactga	ccccaaggag	cctggcactg	1620
attggcatca	cattgatcta	gaactggctc	agccgccgaa	gagtaggaaa	agagaagggc	1680
tgctcagga	aacattggct	gggggcacgg	aataagcaca	tagtaaaaaag	ggaacatcag	1740
ggtcaaattg	aaatcacctg	agacaggaaa	cagggagttc	atltggccac	actggaagaa	1800
aggcaagaaa	gaggaagaca	agtcttggag	taccctggct	gttctccaca	ctcacaagac	1860
atcagctata	ctctgcttgg	tgcataagaa	agagaaaaga	gatgcctttt	gtgtttttgag	1920
taagaataat	taaaccataa	ggaagaccat	gtataaaaact	gatggaaata	atagtcacca	1980
aagtacagca	cataccattt	tgtgtcta	aacaatgtag	cacagtaatg	actgtacatg	2040
tcatgtgatg	tataccaaac	aagattgttg	taaatcatat	tttttattac	aacactaagt	2100
tctgcttctg	cattcctagg	tttcatcatt	tttggtcctt	tagcatggcc	acttacaatt	2160
ttttaacatg	agataacaca	tcagggtgtca	gaacttgcct	gaagggaatt	accagaagta	2220
atltgtgttt	gagatggggt	ggaaattgga	attatattag	tagccgggtg	agatacaagt	2280
tctctgactg	tggtgggaaa	ggataagtgc	taccgttgag	aagggaagaa	aggctgagtc	2340
taggtggaga	aaaatatcaa	cagaactcta	gccaaaggca	agccccagaa	ctcagacaac	2400
agaaaggaaa	tcctaatacct	tctgttttga	gaagagagaa	ctgtagttgc	ttcacttcct	2460
atltcatgac	agaataactg	caaactttta	agatcaggaa	atgtagacat	ctagtgattt	2520
cttttagtaga	cagtttaatt	ttccccaaga	ttaggagaca	cttctgtgca	ggttctaaaa	2580
ggagcccaat	ggcctggggg	gggagtgggg	agtatagtag	gaatatgtgg	gatttggttt	2640
aagttcatca	ttgggagagt	tcctggatcc	ttgcaagctt	agataaatgt	gatctttatt	2700
agatagcagt	ggcatgcttt	taaaaaaaaa	aggcaatgaa	aatttagcaa	gccactgaat	2760
ttgagttttc	actttgtttc	taatagtctg	tgtgaatcag	tacagttttc	ttaccctttc	2820
ttggtcttaa	tttccttact	gataaaatgg	ggtagtaata	cctatctcaa	aaaattattg	2880
cacatattaa	ataacattcc	tctatgtatc	tcaatggcat	tagacattag	gagaagcatt	2940
ttgtggagga	tttgaagttg	agatcttcat	ccaagaagta	gcttttcaat	ttgctagaag	3000
cttaatgtag	gcaagccact	tcatlttttca	gaacttgttt	actcatttat	aatatgggaa	3060
taaaaatttg	tgcaagtcag	agaagggtgc	cttaaaaaatg	ttgtggccaa	gccacatgag	3120
atcaaaagaca	cactltttcat	gacctcaaat	gtgggccccag	cctaggtcag	ccaaccccca	3180
tccaaccctt	agactcacga	acaaatccac	ctgagatcag	cagagccacc	ctagatcagc	3240
tgaaactcta	agcacaaaaa	taaaaactta	tcaactgtaa	aaaaaaaaaa	aaaaaaaaaag	3300
tctctcgtat	agcaaaatct	aactgatgca	atctccatct	ggccttcac	cttctccctt	3360
tattgtcctt	tcgtgtattg	ttcatccagc	aaccaggatg	atcttggtta	aacattaaac	3420
agattctgtc	aykctttmaa	aaaaaaaaaa	gccatgaaat	tntagcaagc	cactgaattt	3480
gagttttcac	tttgggtttct	aatatgctgt	gtgaatcaga	ncagktttct	taccctttct	3540
tggtctta	ttccttactg	ataaaatggg	gtwgtaatac	ctatctcaaa	aaattattgc	3600
acatattara	taacattcct	ctatgtatct	caatggcatt	agacattagg	agaagcattt	3660
tgtggaggat	ttgaagttga	gatcttcac	caagaagtag	cttttcaatt	tgstagaagc	3720
ttaatgtagg	caagccactt	catttttcag	aacttgttta	ctcattttata	atatgggaat	3780
aaaaatttgt	gcaagtcaga	gaagggtgcc	ttaaaaatgt	tgtggccaag	ccacatgaga	3840
tcaaagacac	actltttcatg	acctcaaatg	tgggcccagc	ctaggtcagc	caaccccat	3900
ccaaccctta	gactcacgaa	caaatccacc	tgagatcagc	agagccacc	tagatcagct	3960
gaaactctaa	gcacaaaaat	aaaaacttat	cactgtaaaa	aaaaaaaaaa	aaaaaaaaa	4018

<210> 92

<211> 534

<212> DNA

<213> Homo sapiens

<400> 92

atgaactggc	acatgatcat	ctctgggctt	attgtggtag	tgcttaaagt	tggttggaatg	60
accttatttc	tactttattt	cccacagatt	tttaacaaaa	gtaacgatgg	tttcaccacc	120
accaggagct	atggaacagt	ctcacagatt	tttgggagca	gttccccaag	tccaacggc	180
ttcattacca	caaggagcta	tggaacagtc	tgcccaaaag	actgggaatt	ttatcaagca	240
agatgttttt	tcttatccac	ttctgaatca	tcttgggaatg	aaagcaggga	cttttgcaaa	300

ggaaaaggat ccacattggc aattgtcaac acgccagaga aactgaagtt tcttcaggac 360
 ataactgatg ctgagaagta ttttattggc ttaatttacc atcgtgaaga gaaaagggtgg 420
 cgttggatca acaactctgt gttcaatggc aagtacgtga acatgccaca gtttcctggg 480
 gatcttggtt tgcttcaaaa gaccaaacct gagattgctg gggttcaccct ggaa 534

<210> 93

<211> 178

<212> PRT

<213> Homo sapiens

<400> 93

Met Asn Trp His Met Ile Ile Ser Gly Leu Ile Val Val Val Leu Lys
 1 5 10 15
 Val Val Gly Met Thr Leu Phe Leu Leu Tyr Phe Pro Gln Ile Phe Asn
 20 25 30
 Lys Ser Asn Asp Gly Phe Thr Thr Thr Arg Ser Tyr Gly Thr Val Ser
 35 40 45
 Gln Ile Phe Gly Ser Ser Ser Pro Ser Pro Asn Gly Phe Ile Thr Thr
 50 55 60
 Arg Ser Tyr Gly Thr Val Cys Pro Lys Asp Trp Glu Phe Tyr Gln Ala
 65 70 75 80
 Arg Cys Phe Phe Leu Ser Thr Ser Glu Ser Ser Trp Asn Glu Ser Arg
 85 90 95
 Asp Phe Cys Lys Gly Lys Gly Ser Thr Leu Ala Ile Val Asn Thr Pro
 100 105 110
 Glu Lys Leu Lys Phe Leu Gln Asp Ile Thr Asp Ala Glu Lys Tyr Phe
 115 120 125
 Ile Gly Leu Ile Tyr His Arg Glu Glu Lys Arg Trp Arg Trp Ile Asn
 130 135 140
 Asn Ser Val Phe Asn Gly Lys Tyr Val Asn Met Pro Gln Phe Pro Gly
 145 150 155 160
 Asp Leu Gly Leu Leu Gln Lys Thr Lys Pro Glu Ile Ala Gly Phe Thr
 165 170 175
 Leu Glu

<210> 94

<211> 21

<212> PRT

<213> Homo sapiens

<400> 94

Ile Ser Gly Leu Ile Val Val Val Leu Lys Val Val Gly Met Thr Leu
 1 5 10 15
 Phe Leu Leu Tyr Phe
 20

<210> 95

<211> 151

<212> PRT

<213> Homo sapiens

<400> 95

Pro Gln Ile Phe Asn Lys Ser Asn Asp Gly Phe Thr Thr Thr Arg Ser

1				5					10					15			
Tyr	Gly	Thr	Val	Ser	Gln	Ile	Phe	Gly	Ser	Ser	Ser	Pro	Ser	Pro	Asn		
			20					25					30				
Gly	Phe	Ile	Thr	Thr	Arg	Ser	Tyr	Gly	Thr	Val	Cys	Pro	Lys	Asp	Trp		
		35					40					45					
Glu	Phe	Tyr	Gln	Ala	Arg	Cys	Phe	Phe	Leu	Ser	Thr	Ser	Glu	Ser	Ser		
	50					55					60						
Trp	Asn	Glu	Ser	Arg	Asp	Phe	Cys	Lys	Gly	Lys	Gly	Ser	Thr	Leu	Ala		
65					70				75						80		
Ile	Val	Asn	Thr	Pro	Glu	Lys	Leu	Lys	Phe	Leu	Gln	Asp	Ile	Thr	Asp		
			85					90					95				
Ala	Glu	Lys	Tyr	Phe	Ile	Gly	Leu	Ile	Tyr	His	Arg	Glu	Glu	Lys	Arg		
		100					105					110					
Trp	Arg	Trp	Ile	Asn	Asn	Ser	Val	Phe	Asn	Gly	Lys	Tyr	Val	Asn	Met		
	115					120					125						
Pro	Gln	Phe	Pro	Gly	Asp	Leu	Gly	Leu	Leu	Gln	Lys	Thr	Lys	Pro	Glu		
	130				135					140							
Ile	Ala	Gly	Phe	Thr	Leu	Glu											
145					150												

<210> 96
 <211> 3985
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(3985)
 <223> n = A,T,C or G

<400> 96
 gagactgtga agaaggaaga acgttgcttg ggcaaaagga gcatattctc aggagacggg 60
 gccctgcct gccacaccaa gcattaggcc accaggaaga ccccatctg caagcaagcc 120
 tagccttcca gggagaaaga ggccctgca gctccttcat catgaactgg cacatgatca 180
 tctctgggct tattgtggtg gtgcttaaag ttgttggaat gacctattt ctactttatt 240
 tcccacagat ttttaacaaa agtaacgat gtttcaccac caccaggagc tatggaacag 300
 tctgccccaa agactgggaa ttttatcaag caagatgttt tttcttatcc acttctgaat 360
 catcttgga gaaagcagg gacttttgca aaggaaaagg atccacattg gcaattgtca 420
 acacgcgaga gaaactgaag tttcttcagg acataactga tgctgagaag tattttattg 480
 gcttaattta ccatcgtaga gagaaaaggt ggcgttggat caacaactct gtgttcaatg 540
 gcaatgttac caatcagaat cagaatttca actgtgagac cattggccta acaaagacat 600
 ttgatgctgc atcatgtgac atcagctacc gcaggatctg tgagaagaat gccaaatgat 660
 cacagttccc tgtgacaaga actatacttg caactctttt tgaatccata caggctcgtc 720
 ggccaatgat tcttttactt acctatctgt ctaccagtag cggtccttgc ccatttggga 780
 aactgagctt ctttcttctg cactggggga ctggatgcta gccatctcca ggagacagga 840
 tcagttttac ggaaacaact cagtttagtat agagatgagg tccgcttctg tagtactgag 900
 catttctgac tgatcaaaaa ggcctagctc ttgtgtttat tttagcctca 960
 gagtatacca tactactagg gagtaactgt agagtgaaga attataaaca ttatttaggg 1020
 attaccatgg tggaagaggg ataaacatag gtctgtgac ttcgtctctg ttctcaaggg 1080
 aacccattc acatgccctt cctaactcca caagcgaggg tagcagaggc tctcctcagt 1140
 ctgaactaag gcttggcctt ggggagggct cctagtgtct agcttgagc agcacggaca 1200
 gcagcattgt ttatgggaat ggagagaggt ctgggcagga taggaacctt cttggagacc 1260
 cttttgaaga aaaccaggca gccaaaggag ccaaacacac tagattttctg ttcttcagca 1320
 aagccctgaa gagacactta agctaaaaat tcccttgta tatttctgaa actccattat 1380
 aacatatgta actcctttgt aaccaaatt taggtaagca ggcttcctt gctctgaagg 1440
 ttttgagtac ctggctgtat ttgttgagta tttttaaatt tttggatagt ctcttaggca 1500

acaataatca	caatatatctc	atcccttcag	ttctggagaa	agcctgatac	caggcacagc	1560
ctactgacce	caaggagcct	ggcactgatt	ggcatcacat	tgatctagaa	ctggtccagc	1620
cgccgaagag	taggaaaaga	gaagggtctg	tcagggaac	attggctggg	ggcacggaat	1680
aagcacatag	taaaaaggga	acatcagggt	caaatggaaa	tcacctgaga	caggaaacag	1740
ggagttcatt	tggccacact	ggaagaaagg	caagaaagag	gaagacaagt	cttggagtac	1800
cctggctggt	ctccacactc	acaagacatc	agctatactc	tgcttgggtg	ataagaaaga	1860
gaaaagagat	gccttttctg	ttttgagtaa	gaataattaa	accataagga	agaccatgta	1920
taaaactgat	ggaaataata	gtcaccaaag	tacagcacat	accattttgt	gtctaataac	1980
aatgtagcac	agtaatgact	gtacatgtca	ttgtatgtat	accaaacaag	attgttgtaa	2040
atcatatctt	ttattacaac	actaagttct	gcttctgcat	tcctagggtt	catcattttt	2100
ggctccttag	catggccact	tacaattttt	taacatgaga	taacacatca	ggtgtcagaa	2160
cttgcttgaa	gggaattacc	agaagtaatt	tgtgtttgag	atggggtgga	aatttgaatt	2220
atattagtag	cgggtggaga	tacaagtctt	ctgactgtgt	tgggaaagga	taagtgtac	2280
cgttgagaag	ggaagaaagg	ctgagcttag	gtggagaaaa	atatcaacag	aactctagcc	2340
aaaggcaagc	cccagaactc	agacaacaga	aaggaaatcc	taatccttct	gttttgagaa	2400
gagagaactg	tagttgcttc	acttcctatt	tcatgacaga	ataactgcaa	acttttaaga	2460
tcaggaaatg	tagacatcta	gtgatttctt	tagtagacag	tttaatttcc	cccaagatta	2520
ggagacactt	ctgtgcaggt	tctaaaagga	gcccaatggc	ctggggtggg	agtggggagt	2580
agatagggaa	tatgtgggat	ttgggtttaag	ttcatcattg	ggagagttcc	tggatccttg	2640
caagcttaga	taaatgtgat	ctttattaga	tagcagtggc	atgcttttaa	aaaaaaaaagg	2700
caatgaaaat	ttagcaagcc	actgaatttg	agttttcact	ttgtttctaa	tatgctgtgt	2760
gaatcagtag	agttttctta	ccctttcttg	gtcttaattt	ccttactgat	aaaatggggg	2820
agtaatacct	attctcaaaa	attattgcac	atattaaata	acattcctct	atgtatctca	2880
atggcattag	acattaggag	aagcattttg	tggaggattt	gaagttgaga	tcttcatcca	2940
agaagtagct	tttcaatttg	ctagaagctt	aatgtaggca	agccacttca	tttttcagaa	3000
cttgtttact	cattttataat	atgggaataa	aaatttgtgc	aagtcagaga	agggtgcctt	3060
aaaaatgttg	tggccaagcc	acatgagatc	aaagacacac	ttttcatgac	ctcaaagtgt	3120
ggcccagcct	aggtcagcca	accccatcc	aacccttaga	ctcacgaaca	aatccacctg	3180
agatcagcag	agccacccta	gatcagctga	aactctaagc	acaaaaataa	aaacttatca	3240
ctgtaaaaaa	aaaaaaaaaa	aaaaaagctt	ctcgtatagc	aaaatctaac	tgatgcaatc	3300
tccatctggc	cttcacctt	ctccctttat	tgtcctttcg	tgtattgttc	atccagcaac	3360
caggatgata	ttgttaaaac	attaaacaga	ttctgtcayk	ctttmaaaaa	aaaaaaaagcc	3420
atgaaattnt	agcaagccac	tgaatttgag	ttttcacttt	ggttttcta	atgctgtgtg	3480
aatcaganca	gkttttctac	cctttcttgg	tcttaatttc	cttactgata	aaatgggggtw	3540
gtaataccta	tctcaaaaaa	ttattgcaca	tattarataa	cattcctcta	tgtatctcaa	3600
tggcattaga	cattaggaga	agcattttgt	ggaggatttg	aagttgagat	cttcatccaa	3660
gaagtagctt	ttcaatttgs	tagaagctta	atgtaggcaa	gccacttcat	ttttcagaac	3720
ttgtttactc	attttataata	tgggaataaa	aatttgtgca	agtcagagaa	gggtgcctta	3780
aaaatgttgt	ggccaagcca	catgagatca	aagcacact	tttcatgacc	tcaaagtgtg	3840
gcccagccta	ggtcagccaa	cccccatcca	acccttagac	tcacgaacaa	atccactga	3900
gatcagcaga	gccaccctag	atcagctgaa	actctaagca	caaaaaataa	aaacttatcac	3960
tgtaaaaaaa	aaaaaaaaaa	aaaaa				3985

<210> 97

<211> 495

<212> DNA

<213> Homo sapiens

<400> 97

atgaactggc	acatgatcat	ctctgggctt	attgtggtag	tgcttaaagt	tgttggaatg	60
accttatttc	tactttatct	cccacagatt	tttaacaaaa	gtaacgatgg	tttcaccacc	120
accaggagct	atggaacagt	ctgccccaaa	gactgggaat	tttatcaagc	aagatgtttt	180
ttcttatcca	cttctgaatc	atcttggaat	gaaagcaggg	acttttgcaa	aggaaaagga	240
tccacatttg	caattgtcaa	cacgccagag	aaactgaagt	ttcttcagga	cataactgat	300
gctgagaagt	attttatttg	cttaatttac	catcgtgaag	agaaaagggtg	gcgttggtac	360
aacaactctg	tgttcaatgg	caatgttacc	aatcagaatc	agaatttcaa	ctgtgcgacc	420
attggcctaa	caaagacatt	tgatgctgca	tcagtgtaca	tcagctaccg	caggatctgt	480

gagaagaatg ccaaa

495

<210> 98
<211> 165
<212> PRT
<213> Homo sapiens

<400> 98
Met Asn Trp His Met Ile Ile Ser Gly Leu Ile Val Val Val Leu Lys
1 5 10 15
Val Val Gly Met Thr Leu Phe Leu Leu Tyr Phe Pro Gln Ile Phe Asn
20 25 30
Lys Ser Asn Asp Gly Phe Thr Thr Thr Arg Ser Tyr Gly Thr Val Cys
35 40 45
Pro Lys Asp Trp Glu Phe Tyr Gln Ala Arg Cys Phe Phe Leu Ser Thr
50 55 60
Ser Glu Ser Ser Trp Asn Glu Ser Arg Asp Phe Cys Lys Gly Lys Gly
65 70 75 80
Ser Thr Leu Ala Ile Val Asn Thr Pro Glu Lys Leu Lys Phe Leu Gln
85 90 95
Asp Ile Thr Asp Ala Glu Lys Tyr Phe Ile Gly Leu Ile Tyr His Arg
100 105 110
Glu Glu Lys Arg Trp Arg Trp Ile Asn Asn Ser Val Phe Asn Gly Asn
115 120 125
Val Thr Asn Gln Asn Gln Asn Phe Asn Cys Ala Thr Ile Gly Leu Thr
130 135 140
Lys Thr Phe Asp Ala Ala Ser Cys Asp Ile Ser Tyr Arg Arg Ile Cys
145 150 155 160
Glu Lys Asn Ala Lys
165

<210> 99
<211> 21
<212> PRT
<213> Homo sapiens

<400> 99
Ile Ser Gly Leu Ile Val Val Val Leu Lys Val Val Gly Met Thr Leu
1 5 10 15
Phe Leu Leu Tyr Phe
20

<210> 100
<211> 138
<212> PRT
<213> Homo sapiens

<400> 100
Pro Gln Ile Phe Asn Lys Ser Asn Asp Gly Phe Thr Thr Thr Arg Ser
1 5 10 15
Tyr Gly Thr Val Cys Pro Lys Asp Trp Glu Phe Tyr Gln Ala Arg Cys
20 25 30
Phe Phe Leu Ser Thr Ser Glu Ser Ser Trp Asn Glu Ser Arg Asp Phe
35 40 45
Cys Lys Gly Lys Gly Ser Thr Leu Ala Ile Val Asn Thr Pro Glu Lys

50		55		60
Leu Lys Phe Leu Gln Asp Ile Thr Asp Ala Glu Lys Tyr Phe Ile Gly				
65		70	75	80
Leu Ile Tyr His Arg Glu Glu Lys Arg Trp Arg Trp Ile Asn Asn Ser				
	85	90	95	
Val Phe Asn Gly Asn Val Thr Asn Gln Asn Gln Asn Phe Asn Cys Ala				
	100	105	110	
Thr Ile Gly Leu Thr Lys Thr Phe Asp Ala Ala Ser Cys Asp Ile Ser				
	115	120	125	
Tyr Arg Arg Ile Cys Glu Lys Asn Ala Lys				
130	135			

<210> 101
 <211> 3958
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(3958)
 <223> n = A,T,C or G

<400> 101

gagactgtga	agaaggaaga	acgttgcttg	ggcaaaagga	gcatattctc	aggagacggg	60
gccctgcct	gccacaccaa	gcattaggcc	accaggaaga	cccccatctg	caagcaagcc	120
tagccttcca	gggagaaaga	ggcccctgca	gctccttcat	catgaactgg	cacatgatca	180
tctctgggct	tattgtggta	gtgcttaaag	ttgttggat	gaccttattt	ctactttatt	240
ttccacagat	ttttaacaaa	agtaacgatg	gtttcaccac	caccaggagc	tatggaacag	300
tctgccccaa	agactgggaa	ttttatcaag	caagatgttt	tttcttatcc	acttctgaat	360
catcttggaa	tgaaagcagg	gacttttgca	aaggaaaagg	atccacattg	gcaattgtca	420
acacgccaga	gaaactgaag	tttcttcagg	acataactga	tgctgagaag	tattttattg	480
gcttaattta	ccatcgtgaa	gagaaaaggt	ggcgttggat	caacaactct	gtgttcaatg	540
gcaagtacgt	gaacatgcc	cagtttctctg	gggatcttgg	tttgcttcaa	aagaccaaac	600
ctgagattgc	tgggttcacc	ctggaatagc	tcaaacgctg	acacttgact	ctgttctgct	660
cttctccttt	cttccaaccc	atctattccc	tatctgtcta	ccagtagcgg	tccttgccca	720
tttgggaaac	tgagcttctt	tcttctgcac	tgggggactg	gatgctagcc	atctccagga	780
gacaggatca	gttttacgga	aacaactcag	ttagtataga	gatgaggctc	gcttctgtag	840
tactgagcat	ttctgactga	tcaaaaaggc	ctagtctgtt	gacagggttt	gttttatatt	900
agcctcagag	tataccatac	tactaggagg	taactgtaga	gtgagaaatt	ataaacatta	960
tttagggatt	accatgggtg	aagagggata	aacataggct	ctgtgacttc	gtctctgttc	1020
tcaagggaa	cccattcaca	tggccctcct	aactccacaa	gcgagggtag	cagaggctct	1080
cctcagctctg	aactaaggct	tggccttggg	gagggctcct	agtgtctgag	ttggagcagc	1140
acggacagca	gcattgttta	tgggaatgga	gagaggtctg	ggcaggatag	gaaccttctt	1200
ggagaccctt	ttgaagaaaa	ccaggcagcc	aaggagacca	aacacactag	atcttctgtt	1260
ttcagcaaag	ccctgaagag	acacttaagc	taaaaattcc	cttgtcatat	ttctgaaact	1320
ccattataac	atatgtaact	cctttgtaac	caaaatttag	gtaagcaggc	ttcctttgct	1380
ctgaagggtt	tgagtacctg	gctgtatttg	ttgagtattt	ttaaaatttt	ggatagtctc	1440
ttaggcaaca	ataatcaca	tataattcat	ccttcagttc	tggagaaagc	ctgataccag	1500
gcacagccta	ctgaccccaa	ggagcctggc	actgattggc	atcacattga	tctagaactg	1560
gtccagccgc	cgaagagtag	gaaaagagaa	gggctgtcta	gggaaacatt	ggctgggggc	1620
acggaataag	cacatagtaa	aaagggaaca	tcagggtcaa	atggaaatca	cctgagacag	1680
gaaacagggg	gttcatttgg	ccacactgga	agaaaggcaa	gaaagaggaa	gacaagtctt	1740
ggagtaccct	ggctgttctc	cacactcaca	agacatcagc	tatactctgc	ttggtgcata	1800
agaaagagaa	aagagatgcc	ttttgtgttt	tgagtaagaa	taattaaacc	ataaggaaga	1860
ccatgtataa	aactgatgga	aataatagtc	accaaagtac	agcacatacc	attttgtgtc	1920
taataacaat	gtagcacagt	aatgactgta	catgtcattg	tatgtatacc	aaacaagatt	1980

gttgtaaatac	atatTTTTTTa	ttacaacact	aagttctgct	tctgcattcc	taggtttcat	2040
catttttggc	tccttagcat	ggccacttac	aatttttttaa	catgagataa	cacatcaggt	2100
gtcagaactt	gcttgaaggg	aattaccaga	agtaatttgt	gtttgagatg	gggtggaaat	2160
tggaattata	ttagtagccg	gtggagatac	aagttctctg	actgtgttgg	gaaaggataa	2220
gtgctaccgt	tgagaaggga	agaaaaggctg	agtctagggtg	gagaaaaata	tcaacagaac	2280
tctagccaaa	ggcaagcccc	agaactcaga	caacagaaaag	gaaatcctaa	tccttctgtt	2340
ttgagaagag	agaactgtag	ttgcttcact	tcctattttca	tgacagaata	actgcaact	2400
tttaagatca	ggaaatgtag	acatctagt	atttcttttag	tagacagttt	aatttcccc	2460
aagattagga	gacacttctg	tgcaggttct	aaaaggagcc	caatggcctg	gggtgggagt	2520
ggggagtaga	tagggaatat	gtgggattttg	gtttaagttc	atcattggga	gagttcctgg	2580
atccttgcaa	gcttagataa	atgtgatctt	tattagatag	cagtggcatg	cttttaaaaa	2640
aaaaaggcaa	tgaaaatttta	gcaagccact	gaatttgagt	tttcaactttg	tttctaatat	2700
gctgtgtgaa	tcagtacagt	tttcttacc	tttcttggtc	ttaatttcct	tactgataaa	2760
atggggtagt	aatacctatc	tcaaaaaatt	attgcacata	ttaaataaca	ttcctctatg	2820
tatctcaatg	gcattagaca	ttaggagaag	cattttgtgg	aggatttgaa	gttgagatct	2880
tcattcaaga	agtagctttt	caatttgcta	gaagcttaat	gtaggcaagc	cacttcattt	2940
ttcagaactt	gtttactcat	ttataatatg	ggaataaaaa	tttgtgcaag	tcagagaagg	3000
gtgccttaaa	aatgttgtgg	ccaagccaca	tgagatcaaa	gacacacttt	tcatgacctc	3060
aaatgtgggc	ccagcctagg	tcagccaacc	cccattccaac	ccttagactc	acgaacaaat	3120
ccacctgaga	tcagcagagc	caccctagat	cagctgaaac	tctaagcaca	aaaataaaaa	3180
cttatcactg	taaaaaaaaa	aaaaaaaaaa	aaagtctctc	gtatagcaaa	atctaactga	3240
tgcactctcc	atctggcctt	catccttctc	cctttattgt	cctttcgtgt	attgttcatc	3300
cagcaaccag	gatgatcttg	ttaaaacatt	aaacagattc	tgtcaykctt	tmaaaaaaaaa	3360
aaaagccatg	aaattntagc	aagccactga	atttgagttt	tcacttttgt	ttctaatatg	3420
ctgtgtgaat	cagancagkt	ttcttaccct	ttcttggtct	taatttcctt	actgataaaa	3480
tggggwtgta	atacctatct	caaaaaatta	ttgcacatat	tarataacat	tcctctatgt	3540
atctcaatgg	cattagacat	taggagaagc	attttgtgga	ggatttgaag	ttgagatctt	3600
catccaagaa	gtagctttttc	aatttgstag	aagcttaatg	taggcaagcc	acttcatttt	3660
tcagaacttg	tttactcatt	tataatatgg	gaataaaaaat	ttgtgcaagt	cagagaaggg	3720
tgccttaaaa	atgttgtggc	caagccacat	gagatcaaag	acacactttt	catgacctca	3780
aatgtgggac	cagcctaggc	cagccaaccc	ccttagactca	cgaacaaatc	3840	
cacctgagat	cagcagagcc	accctagatc	agctgaaact	ctaagcacaa	aaataaaaaac	3900
ttatcactgt	aaaaaaaaaa	aaaaaaaaaa	aagaaagcac	ctgcccgggc	ggccgcc	3958

<210> 102
 <211> 465
 <212> DNA
 <213> Homo sapiens

<400> 102						
atgaactggc	acatgatcat	ctctgggctt	attgtggtag	tgcttaaaagt	tgttggaatg	60
accttatttc	tactttattt	cccacagatt	tttaacaaaa	gtaacgatgg	tttcaccacc	120
accaggagct	atggaacagt	ctgccccaaa	gactgggaat	tttatcaagc	aagatgtttt	180
ttcttatcca	cttctgaatc	atcttggaat	gaaagcaggg	acttttgcaa	aggaaaagga	240
tccacatttg	caattgtcaa	cacgccagag	aaactgaagt	ttcttcagga	cataactgat	300
gctgagaagt	atttttattg	cttaattttac	catcgtgaag	agaaaagggtg	gcgttggtatc	360
aacaactctg	tgttcaatgg	caagtacgtg	aacatgccac	agtttccttg	ggatcttggt	420
ttgcttcaaa	agaccaaacc	tgagattgct	gggttcaccc	tggaa		465

<210> 103
 <211> 155
 <212> PRT
 <213> Homo sapiens

<400> 103			
Met Asn Trp His Met Ile Ile Ser Gly Leu Ile Val Val Val Leu Lys			
1	5	10	15

Val	Val	Gly	Met	Thr	Leu	Phe	Leu	Leu	Tyr	Phe	Pro	Gln	Ile	Phe	Asn
			20					25					30		
Lys	Ser	Asn	Asp	Gly	Phe	Thr	Thr	Thr	Arg	Ser	Tyr	Gly	Thr	Val	Cys
		35					40					45			
Pro	Lys	Asp	Trp	Glu	Phe	Tyr	Gln	Ala	Arg	Cys	Phe	Phe	Leu	Ser	Thr
	50					55					60				
Ser	Glu	Ser	Ser	Trp	Asn	Glu	Ser	Arg	Asp	Phe	Cys	Lys	Gly	Lys	Gly
65					70				75						80
Ser	Thr	Leu	Ala	Ile	Val	Asn	Thr	Pro	Glu	Lys	Leu	Lys	Phe	Leu	Gln
				85				90						95	
Asp	Ile	Thr	Asp	Ala	Glu	Lys	Tyr	Phe	Ile	Gly	Leu	Ile	Tyr	His	Arg
			100					105					110		
Glu	Glu	Lys	Arg	Trp	Arg	Trp	Ile	Asn	Asn	Ser	Val	Phe	Asn	Gly	Lys
		115					120					125			
Tyr	Val	Asn	Met	Pro	Gln	Phe	Pro	Gly	Asp	Leu	Gly	Leu	Leu	Gln	Lys
	130					135					140				
Thr	Lys	Pro	Glu	Ile	Ala	Gly	Phe	Thr	Leu	Glu					
145					150					155					

<210> 104
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 104
 Ile Ser Gly Leu Ile Val Val Val Leu Lys Val Val Gly Met Thr Leu
 1 5 10 15
 Phe Leu Leu Tyr Phe
 20

<210> 105
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 105
 Pro Gln Ile Phe Asn Lys Ser Asn Asp Gly Phe Thr Thr Thr Arg Ser
 1 5 10 15
 Tyr Gly Thr Val Cys Pro Lys Asp Trp Glu Phe Tyr Gln Ala Arg Cys
 20 25 30
 Phe Phe Leu Ser Thr Ser Glu Ser Ser Trp Asn Glu Ser Arg Asp Phe
 35 40 45
 Cys Lys Gly Lys Gly Ser Thr Leu Ala Ile Val Asn Thr Pro Glu Lys
 50 55 60
 Leu Lys Phe Leu Gln Asp Ile Thr Asp Ala Glu Lys Tyr Phe Ile Gly
 65 70 75 80
 Leu Ile Tyr His Arg Glu Glu Lys Arg Trp Arg Trp Ile Asn Asn Ser
 85 90 95
 Val Phe Asn Gly Lys Tyr Val Asn Met Pro Gln Phe Pro Gly Asp Leu
 100 105 110
 Gly Leu Leu Gln Lys Thr Lys Pro Glu Ile Ala Gly Phe Thr Leu Glu
 115 120 125

<210> 106

<211> 3925
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(3925)
 <223> n = A,T,C or G

<400> 106
 gagactgtga agaaggaaga acgttgcttg ggcaaaagga gcatattctc aggagacggg 60
 gcccctgcct gccacaccaa gcattaggcc accaggaaga ccccatctg caagcaagcc 120
 tagccttcca gggagaaaga ggcccctgca gctccttcat catgaactgg cacatgatca 180
 tctctgggct tattgtggta gtgcttaaag ttgttggaat gaccttattt ctactttatt 240
 tctgccccaa agactgggaa ttttatcaag caagatgttt tttcttatcc acttctgaat 300
 catcttgga tgaaagcagg gacttttgca aaggaaaagg atccacattg gcaattgtca 360
 acacgccaga gaaactgaag tttcttcagg acataactga tgctgagaag tattttattg 420
 gcttaattta ccatcgtaga gagaaaaggt ggcgttggaat caacaactct gtgttcaatg 480
 gcaatgttac caatcagaat cagaatttca actgtgcgac cattggccta acaaagacat 540
 ttgatgctgc atcatgtgac atcagctacc gcaggatctg tgagaagaat gccaatgat 600
 cacagttccc tgtgacaaga actatacttg caactctttt tgaatccata caggtcgtct 660
 ggccaatgat tcttttactt acctatctgt ctaccagtag cggtccttgc ccatttggga 720
 aactgagctt ctttcttctg cactggggga ctggatgcta gccatctcca ggagacagga 780
 tcagttttac ggaaacaact cagttagtat agagatgagg tccgcttctg tagtactgag 840
 catttctgac tgatcaaaaa ggcctagtct gttgacaggg tttgttttat tttagcctca 900
 gagtatacca tactactagg gagtaactgt agagtgagaa attataaaca ttatttaggg 960
 attaccatgg tggaagaggg ataaacatag gtcctgtgac ttcgtctctg ttctcaaggg 1020
 aaccccatte acatgccctt cctaactcca caagcgaggg tagcagaggg tctcctcagt 1080
 ctgaactaag gcttggcctt ggggagggct ctagtgctg agcttggagc agcacggaca 1140
 gcagcattgt ttatgggaat ggagagaggt ctgggcagga taggaacctt cttggagacc 1200
 cctttgaaga aaaccaggca gccaggggag ccaaacacac tagatttctg ttcttcagca 1260
 aagccctgaa gagacactta agctaaaaat tcccttgta tatttctgaa actccattat 1320
 aacatatgta actcctttgt aaccaaatt taggtaagca ggcttcctt gctctgaagg 1380
 ttttgagtac ctggctgtat ttgttgagta tttttaaatt tttggatagt ctcttaggca 1440
 acaataatca caatatattc atcccttcag ttctggagaa agcctgatac caggcacagc 1500
 ctactgacct caaggagcct ggcactgatt ggcacacat tgatctagaa ctggtccagc 1560
 cgccgaagag taggaaaaga gaagggtctg tcagggaac attggctggg ggcacggaat 1620
 aagcacatag taaaaaggga acatcagggg caaatggaaa tcacctgaga caggaaacag 1680
 ggagttcatt tggccacact ggaagaaagg caagaaagag gaagacaagt cttggagtac 1740
 ccttggtgtt ctccacactc acaagacatc agctatactc tgcttggtgc ataagaaaga 1800
 gaaaagagat gccttttgtg ttttgagtaa gaataattaa accataagga agaccatgta 1860
 taaaactgat ggaaataata gtcaccaag tacagcacat accattttgt gtctaataac 1920
 aatgtagcac agtaatgact gtacatgtca ttgtatgtat accaaacaag attgttgtaa 1980
 atcatatttt ttattacaac actaagttct gcttctgcat tcctagggtt catcattttt 2040
 ggctccttag catggccact tacaattttt taacatgaga taacacatca ggtgtcagaa 2100
 cttgcttgaa gggaattacc agaagtaatt tgtgtttgag atggggtgga aattggaatt 2160
 atattagtag ccggtggaga tacaagttct ctgactgtgt tgggaaagga taagtgtact 2220
 cgttgagaag ggaagaaagg ctgagtctag gtggagaaaa atatcaacag aactctagcc 2280
 aaaggcaagc cccagaactc agacaacaga aaggaaatcc taatccttct gttttgagaa 2340
 gagagaactg tagttgcttc acttcttatt tcatgacaga ataactgcaa acttttaaga 2400
 tcaggaaatg tagacatcta gtgatttctt tagtagacag ttttaatttc cccaagatta 2460
 ggagacactt ctgtgcagg tctaaaagga gcccaatggc ctggggtggg agtggggagt 2520
 agatagggaa tatgtgggat ttggtttaag ttcacattg ggagagtcc tggatccttg 2580
 caagcttaga taaatgtgat ctttattaga tagcagtggc atgcttttaa aaaaaaagg 2640
 caatgaaaat ttagcaagcc actgaatttg agttttcact ttgtttctaa tatgctgtgt 2700
 gaatcagtac agttttctta ccctttcttg gtcttaattt ccttactgat aaaatggggg 2760
 agtaatacct atctcaaaaa attattgcac atattaaata acattcctct atgtatctca 2820

```

atggcattag acattaggag aagcattttg tggaggattt gaagttgaga tcttcatcca 2880
agaagtagct tttcaatttg ctagaagctt aatgtaggca agccacttca tttttcagaa 2940
cttgtttact catttataat atgggaataa aaatttgtgc aagtcagaga aggggtgcctt 3000
aaaaatgttg tggccaagcc acatgagatc aaagacacac ttttcatgac ctcaaagtgtg 3060
ggcccagcct aggtcagcca acccccatcc aacccttaga ctacgaaca aatccacctg 3120
agatcagcag agccacccta gatcagctga aactctaagc acaaaaataa aaacttatca 3180
ctgtaaaaaa aaaaaaaaaa aaaaaagtct ctcgatatagc aaaatctaac tgatgcaatc 3240
tccatctggc cttcatcctt ctccctttat tgtcctttcg tgtattgttc atccagcaac 3300
caggatgatc ttgttaaaac attaaacaga ttctgtcayk ctttmaaaaa aaaaaaagcc 3360
atgaaattnt agcaagccac tgaatttgag ttttactttt ggtttcta atgctgtgtg 3420
aatcaganca gktttcttac ctttcttggt tcttaatttc cttactgata aaatgggggtw 3480
gtaataccta tctcaaaaaa ttattgcaca tattarataa cattcctcta tgtatctcaa 3540
tggcattaga cattaggaga agcattttgt ggaggatttg aagttgagat cttcatccaa 3600
gaagtagctt ttcaatttgs tagaagctta atgtaggcaa gccacttcat ttttcagaac 3660
ttgtttactc atttataata tgggaataaa aatttgtgca agtcagagaa ggggtgcctta 3720
aaaatgttgt ggccaagcca catgagatca aagacacact tttcatgacc tcaaagtgtg 3780
gcccagccta ggtcagccaa ccccatcca acccttagac tcacgaacaa atccacctga 3840
gatcagcaga gccaccctag atcagctgaa actctaagca caaaaataaa aacttatcac 3900
tgtaaaaaaa aaaaaaaaaa aaaaaa 3925

```

<210> 107
 <211> 435
 <212> DNA
 <213> Homo sapiens

```

<400> 107
atgaactggc acatgatcat ctctgggctt attgtggtag tgcttaaagt tgttggaatg 60
accttatttc tactttattt ctgccccaaa gactgggaat tttatcaagc aagatgtttt 120
ttcttatcca cttctgaatc atcttggaat gaaagcaggg acttttgcaa aggaaaagga 180
tccacattgg caattgtcaa cagccagag aaactgaagt ttcttcagga cataactgat 240
gctgagaagt attttatttg cttaatttac catcgtgaag agaaaagggtg gcgttggtac 300
aacaactctg tgttcaatgg caatgttacc aatcagaatc agaatttcaa ctgtgcgacc 360
attggcctaa caaagacatt tgatgctgca tcatgtgaca tcagctaccg caggatctgt 420
gagaagaatg ccaaa 435

```

<210> 108
 <211> 145
 <212> PRT
 <213> Homo sapiens

```

<400> 108
Met Asn Trp His Met Ile Ile Ser Gly Leu Ile Val Val Val Leu Lys
 1          5          10          15
Val Val Gly Met Thr Leu Phe Leu Leu Tyr Phe Cys Pro Lys Asp Trp
          20          25          30
Glu Phe Tyr Gln Ala Arg Cys Phe Phe Leu Ser Thr Ser Glu Ser Ser
          35          40          45
Trp Asn Glu Ser Arg Asp Phe Cys Lys Gly Lys Gly Ser Thr Leu Ala
          50          55          60
Ile Val Asn Thr Pro Glu Lys Leu Lys Phe Leu Gln Asp Ile Thr Asp
65          70          75          80
Ala Glu Lys Tyr Phe Ile Gly Leu Ile Tyr His Arg Glu Glu Lys Arg
          85          90          95
Trp Arg Trp Ile Asn Asn Ser Val Phe Asn Gly Asn Val Thr Asn Gln
          100          105          110
Asn Gln Asn Phe Asn Cys Ala Thr Ile Gly Leu Thr Lys Thr Phe Asp
          115          120          125

```


Ala Ala Ser Cys Asp Ile Ser Tyr Arg Arg Ile Cys Glu Lys Asn Ala
 130 135 140

Lys
 145

<210> 109
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 109

Ile Ser Gly Leu Ile Val Val Val Leu Lys Val Val Gly Met Thr Leu
 1 5 10 15
 Phe Leu Leu Tyr Phe Cys
 20

<210> 110
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 110

Pro Lys Asp Trp Glu Phe Tyr Gln Ala Arg Cys Phe Phe Leu Ser Thr
 1 5 10 15
 Ser Glu Ser Ser Trp Asn Glu Ser Arg Asp Phe Cys Lys Gly Lys Gly
 20 25 30
 Ser Thr Leu Ala Ile Val Asn Thr Pro Glu Lys Leu Lys Phe Leu Gln
 35 40 45
 Asp Ile Thr Asp Ala Glu Lys Tyr Phe Ile Gly Leu Ile Tyr His Arg
 50 55 60
 Glu Glu Lys Arg Trp Arg Trp Ile Asn Asn Ser Val Phe Asn Gly Asn
 65 70 75 80
 Val Thr Asn Gln Asn Gln Asn Phe Asn Cys Ala Thr Ile Gly Leu Thr
 85 90 95
 Lys Thr Phe Asp Ala Ala Ser Cys Asp Ile Ser Tyr Arg Arg Ile Cys
 100 105 110
 Glu Lys Asn Ala Lys
 115

<210> 111
 <211> 3898
 <212> DNA
 <213> Homo sapiens

<220>

<221> misc_feature
 <222> (1)...(3898)
 <223> n = A,T,C or G

<400> 111

gagactgtga agaaggaaga acgttgcttg ggcaaaagga gcatattctc aggagacggg 60
 gccctgcct gccacaccaa gcattaggcc accaggaaga ccccatctg caagcaagcc 120

tagccttcca	gggagaaaaga	ggcccttgca	gtccttcat	catgaactgg	cacatgatca	180
tctctgggct	tattgtggta	gtgcttaaag	ttgttggat	gaccttattt	ctactttatt	240
tctgccccaa	agactgggaa	ttttatcaag	caagatgttt	tttcttatcc	acttctgaat	300
catcttggaa	tgaaagcagg	gacttttgca	aaggaaaagg	atccacattg	gcaattgtca	360
acacgccaga	gaaactgaag	tttcttcagg	acataactga	tgctgagaag	tattttattg	420
gcttaattta	ccatcgtgaa	gagaaaaggt	ggcgttggat	caacaactct	gtgttcaatg	480
gcaagtacgt	gaacatgcc	cagtttctctg	gggatcttgg	tttgcttcaa	aagaccaa	540
ctgagattgc	tgggttcacc	ctggaatagc	tcaaacgctg	acacttgact	ctgttctgct	600
cttctccttt	cttccaaccc	atctattccc	tatctgtcta	ccagtagcgg	tccttgccca	660
tttgggaaac	tgagcttctt	tcttctgcac	tgggggactg	gatgctagcc	atctccagga	720
gacaggatca	gttttacgga	aacaactcag	ttagtataga	gatgagggtcc	gcttctgtag	780
tactgagcat	ttctgactga	tcaaaaaggc	ctagtctgtt	gacagggttt	gttttatttt	840
agcctcagag	tataccatac	tactaggagg	taactgtaga	gtgagaaatt	ataaacatta	900
tttagggatt	accatggtgg	aagagggata	aacatagggtc	ctgtgacttc	gtctctgttc	960
tcaagggaa	cccatctaca	tgccctcct	aactccacaa	gcgagggtag	cagaggctct	1020
cctcagtcgt	aactaaggct	tggccttggg	gagggctcct	agtgtctgagc	ttggagcagc	1080
acggacagca	gcattgttta	tgggaatgga	gagaggctctg	ggcaggatag	gaaccttctt	1140
ggagaccctt	ttgaagaaaa	ccaggcagcc	aaggggagcca	aacacactag	atttctgttc	1200
ttcagcaaa	ccctgaagag	acacttaagc	taaaaattcc	cttgtcatat	ttctgaaact	1260
ccattataac	atatgtaact	cctttgtaac	caaaatttag	gtaagcaggc	ttcctttgct	1320
ctgaagggtt	tgagtacctg	gctgtatttg	ttgagtattt	ttaaaatttt	ggatagtctc	1380
ttaggcaaca	ataatcacaa	tatattcacc	ccttcagttc	tggagaaagc	ctgataccag	1440
gcacagccta	ctgaccccaa	ggagcctggc	actgattggc	atcacattga	tctagaactg	1500
gtccagccgc	cgaagagtag	gaaaagagaa	gggctgtctca	gggaaacatt	ggctgggggc	1560
acggaataag	cacatagtaa	aaagggaaca	tcagggtcaa	atggaaatca	cctgagacag	1620
gaaacaggga	gttcatttgg	ccacactgga	agaaaggcaa	gaaagaggaa	gacaagtctt	1680
ggagtaccct	ggctgttctc	cacactcaca	agacatcagc	tatactctgc	ttgggtgcata	1740
agaaagagaa	aagagatgcc	ttttgtgttt	tgagtaagaa	taattaaacc	ataaggaaga	1800
ccatgtataa	aactgatgga	aataatagtc	accaaagtac	agcacatacc	attttgtgtc	1860
taataacaat	gtagcacagt	aatgactgta	catgtcattg	tatgtatacc	aaacaagatt	1920
gttgtaaatc	atatttttta	ttacaactca	aagttctgct	tctgcattcc	taggtttcat	1980
catttttggc	tccttagcat	ggccacttac	aattttttaa	catgagataa	cacatcaggt	2040
gtcagaactt	gcttgaaggg	aattaccaga	agtaatttgt	gtttgagatg	gggtggaaat	2100
tgggaattata	ttagtagccg	gtggagatac	aagttctctg	actgtgttgg	gaaaggataa	2160
gtgctaccgt	tgagaaggga	agaaaggctg	agtctagggtg	gagaaaaata	tcaacagaac	2220
tctagccaaa	ggcaagcccc	agaactcaga	caacagaaag	gaaatcctaa	tccttctgtt	2280
ttgagaagag	agaactgtag	ttgcttcact	tcctattttca	tgacagaata	actgcaaact	2340
tttaagatca	ggaaatgtag	acatctagtg	atttcttttag	tagacagttt	aatttccccc	2400
aagatttagga	gacacttctg	tgcaggttct	aaaaggagcc	caatggcctg	gggtgggagt	2460
ggggagtaga	tagggaaatg	gtgggatttg	gtttaagttc	atcattggga	gagttcctgg	2520
atccttgcaa	gcttagataa	atgtgatctt	tattagatag	cagtggcatg	cttttaaaaa	2580
aaaaaggcaa	tgaaaattta	gcaagccact	gaatttgagt	tttcaactttg	tttctaatat	2640
gctgtgtgaa	tcagtacagt	tttcttacct	tttcttgggtc	ttaatcttct	tactgataaa	2700
atggggtagt	aatacctatc	tcaaaaaatt	attgcacata	ttaaataaca	ttcctctatg	2760
tatctcaatg	gcattagaca	ttaggagaag	cattttgtgg	aggatttgaa	gttgagatct	2820
tcacccaaga	agtagctttt	caatttgcta	gaagcttaat	gtaggcaagc	cacttcattt	2880
ttcagaactt	gtttactcat	ttataatatg	ggaataaaaa	tttgtgcaag	tcagagaagg	2940
gtgccttaaa	aatgttgtgg	ccaagccaca	tgagatcaaa	gacacacttt	tcatgacctc	3000
aaattgtggc	ccagcctagg	tcagccaacc	cccatccaac	ccttagactc	acgaacaaat	3060
ccacctgaga	tcagcagagc	caccctagat	cagctgaaac	tctaagcaca	aaaataaaaa	3120
cttatcactg	taaaaaaaaa	aaaaaaaaaa	aaagtctctc	gtatagcaaa	atctaactga	3180
tgcaatctcc	atctggcctt	catccttctc	cctttattgt	cctttcgtgt	attgttcac	3240
cagcaaccag	gatgatcttg	ttaaaacatt	aaacagattc	tgtcaykctt	tmaaaaaaaaa	3300
aaaagccatg	aaattntagc	aagccactga	atttgagttt	tcacttttgt	ttctaatatg	3360
ctgtgtgaat	cagancagkt	ttcttaccct	ttcttgggtc	taatttctct	actgataaaa	3420
tggggtwgt	atacctatct	caaaaaatta	ttgcacatat	tarataacat	tcctctatgt	3480
atctcaatgg	cattagacat	taggagaagc	attttgtgga	ggatttgaag	ttgagatctt	3540

```

catccaagaa gtagcttttc aatttgstag aagcttaatg taggcaagcc acttcatttt 3600
tcagaacttg tttactcatt tataatatgg gaataaaaaat ttgtgcaagt cagagaaggg 3660
tgccttaaaa atgttggtggc caagccacat gagatcaaag acacactttt catgacctca 3720
aatgtggggc cagcctaggt cagccaaccc ccatccaacc cttagactca cgaacaaatc 3780
cacctgagat cagcagagcc accctagatc agctgaaact ctaagcacia aaataaaaaac 3840
ttatcactgt aaaaaaaaaa aaaaaaaaaa aagaaagcac ctgcccgggc ggccgccc 3898

```

```

<210> 112
<211> 405
<212> DNA
<213> Homo sapiens

```

```

<400> 112
atgaactggc acatgatcat ctctgggctt attgtggtag tgcttaaagt tgttggaatg 60
accttatttc tactttattt ctgccccaaa gactgggaat tttatcaagc aagatgtttt 120
ttcttatcca cttctgaatc atcttggaat gaaagcaggg acttttgcaa aggaaaagga 180
tccacattgg caattgtcaa cagccagag aaactgaagt ttcttcagga cataactgat 240
gctgagaagt attttattgg cttaatttac catcgtgaag agaaaagggt gcgttggatc 300
aacaactctg tgttcaatgg caagtacgtg aacatgccac agtttcctgg ggatcttggg 360
ttgcttcaaa agaccaaaacc tgagattgct ggggttcaccc tggaa 405

```

```

<210> 113
<211> 135
<212> PRT
<213> Homo sapiens

```

```

<400> 113
Met Asn Trp His Met Ile Ile Ser Gly Leu Ile Val Val Val Leu Lys
1      5      10      15
Val Val Gly Met Thr Leu Phe Leu Leu Tyr Phe Cys Pro Lys Asp Trp
20     25     30
Glu Phe Tyr Gln Ala Arg Cys Phe Phe Leu Ser Thr Ser Glu Ser Ser
35     40     45
Trp Asn Glu Ser Arg Asp Phe Cys Lys Gly Lys Gly Ser Thr Leu Ala
50     55     60
Ile Val Asn Thr Pro Glu Lys Leu Lys Phe Leu Gln Asp Ile Thr Asp
65     70     75     80
Ala Glu Lys Tyr Phe Ile Gly Leu Ile Tyr His Arg Glu Glu Lys Arg
85     90     95
Trp Arg Trp Ile Asn Asn Ser Val Phe Asn Gly Lys Tyr Val Asn Met
100    105    110
Pro Gln Phe Pro Gly Asp Leu Gly Leu Leu Gln Lys Thr Lys Pro Glu
115    120    125
Ile Ala Gly Phe Thr Leu Glu
130    135

```

```

<210> 114
<211> 22
<212> PRT
<213> Homo sapiens

```

```

<400> 114
Ile Ser Gly Leu Ile Val Val Val Leu Lys Val Val Gly Met Thr Leu
1      5      10      15
Phe Leu Leu Tyr Phe Cys
20

```

<210> 115
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 115
 Pro Lys Asp Trp Glu Phe Tyr Gln Ala Arg Cys Phe Phe Leu Ser Thr
 1 5 10 15
 Ser Glu Ser Ser Trp Asn Glu Ser Arg Asp Phe Cys Lys Gly Lys Gly
 20 25 30
 Ser Thr Leu Ala Ile Val Asn Thr Pro Glu Lys Leu Lys Phe Leu Gln
 35 40 45
 Asp Ile Thr Asp Ala Glu Lys Tyr Phe Ile Gly Leu Ile Tyr His Arg
 50 55 60
 Glu Glu Lys Arg Trp Arg Trp Ile Asn Asn Ser Val Phe Asn Gly Lys
 65 70 75 80
 Tyr Val Asn Met Pro Gln Phe Pro Gly Asp Leu Gly Leu Leu Gln Lys
 85 90 95
 Thr Lys Pro Glu Ile Ala Gly Phe Thr Leu Glu
 100 105

<210> 116

<220>
 <223> Unknown

<400> 116
 000

<210> 117

<220>
 <223> Unknown

<400> 117
 000

<210> 118

<220>
 <223> Unknown

<400> 118
 000

<210> 119

<220>
 <223> Unknown

<400> 119
 000

<210> 120
 <220>
 <223> Unknown

<400> 120
 000

<210> 121
 <211> 1909
 <212> DNA
 <213> Homo sapiens

<400> 121
 gctgtttctt ggtggtgttg gaatggtggg cacagtggct gtcactgtca tgcctcagtg 60
 gagagtgtcg gccttcattg aaaacaacat cgtgggtttt gaaaacttct gggaaggact 120
 gtggatgaat tgcgtgaggc aggctaacat caggatgcag tgcaaatct atgattccct 180
 gctggctctt tctccggacc tacaggcagc cagaggactg atgtgtgctg cttccgtgat 240
 gtccttcttg gctttcatga tggccatcct tggcatgaaa tgcaccaggt gcacggggga 300
 caatgagaag gtgaaggctc acattctgct gacggctgga atcatcttca tcatcacggg 360
 catggtggtg ctcattccctg tgagctgggt tgccaatgcc atcatcagag atttctataa 420
 ctcaatagtg aatggtgccc aaaaacgtga gcttgagaa gctctctact taggatggac 480
 cacggcactg gtgctgattg ttggaggagc tctgttctgc tgcgtttttt gttgcaacga 540
 aaagagcagt agctacagat actcgatacc ttcccatcgc acaacccaaa aaagttatca 600
 caccggaaag aagtcaccga gcgtctactc cagaagtcag tatgtgtagt tgtgtatgtt 660
 tttttaactt tactataaag ccatgcaaat gacaaaaatc tatattactt tctcaaaatg 720
 gaccccaaag aaactttgat ttactgttct taactgccta atcttaatta caggaaactgt 780
 gcatcagcta tttatgattc tataagctat ttcagcagaa tgagatatta aacccaatgc 840
 tttgattggt ctagaaaagta tagtaatttg ttttctaagg tggttcaagc atctactctt 900
 tttatcattt acttcaaaat gacattgcta aagactgcat tattttacta ctgtaatttc 960
 tccacgacat agcattatgt acatagatga gtgtaacatt tatactctac atagagacat 1020
 gcttatatgg ttttatttta aatgaaatgc cagtccatta cactgaataa atagaactca 1080
 actattgctt ttcagggaaa tcatggatag ggttgaagaa gggttactatt aattgtttta 1140
 aaacagctta gggattaatg tcctccattt ataataagaa ttaaaatgaa ggctttaatc 1200
 agcattgtaa aggaaattga atggctttct gatatgctgt ttttttagcct aggagttaga 1260
 aatcctaact tctttatcct cttctcccag aggctttttt tttcttgtgt attaaattaa 1320
 cattttttaa aagcagatat tttgtcaagg ggctttgcat tcaaactgct tttccagggc 1380
 tatactcaga agaaagataa aagtgtgatc taagaaaaag tgatgggttt aggaaagtga 1440
 aaatattttt gtttttgtat ttgaagaaga atgatgcatt ttgacaagaa atcatatatg 1500
 tatggatata ttttaataag tatttgagta cagactttga ggtttcatca atataaaata 1560
 aagagcagaa aaatatgtct tggttttcat ttgcttacca aaaaaacaac aacaaaaaaa 1620
 gttgtccttt gagaacttca cctgctccta tgtgggtacc tgagtcaaaa ttgtcatttt 1680
 tgttctgtga aaaataaatt tccttcttgt accatttctg tttagtttta ctaaaatctg 1740
 taaatactgt atttttctgt ttattccaaa tttgatgaaa ctgacaatcc aatttgaaag 1800
 tttgtgtcga cgtctgtcta gcttaaatga atgtgttcta tttgctttat acatttatat 1860
 taataaattg tacatttttc taaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1909

<210> 122
 <211> 645
 <212> DNA
 <213> Homo sapiens

<400> 122
 ctgtttcttg gtggtgttgg aatggtgggc acagtggctg tcaactgtcat gcctcagtgg 60
 agagtgtcgg ccttcattga aaacaacatc gtgggttttg aaaacttctg ggaaggactg 120
 tggatgaatt gcgtgaggca ggctaacatc aggatgcagt gcaaaatcta tgattccctg 180
 ctggctcttt ctccggacct acaggcagcc agaggactga tgtgtgctgc ttccgtgatg 240

```

tccttcttgg ctttcatgat ggccatcctt ggcatgaaat gcaccaggtg cacggggggac 300
aatgagaagg tgaaggctca cattctgctg acggctggaa tcattcttcat catcacgggc 360
atggtggtgc tcatccctgt gagctgggtt gccaatgcca tcatcagaga tttctataac 420
tcaatagtga atgttgccca aaaacgtgag cttggagaag ctctctactt aggatggacc 480
acggcactgg tgcctgattgt tggaggagct ctgttctgct gcgttttttg ttgcaacgaa 540
aagagcagta gctacagata ctcgatacct tcccatcgca caacccaaaa aagttatcac 600
accggaagaa agtcaccgag cgtctactcc agaagtcagt atgtg 645

```

```

<210> 123
<211> 215
<212> PRT
<213> Homo Sapiens

```

```

<400> 123
Leu Phe Leu Gly Gly Val Gly Met Val Gly Thr Val Ala Val Thr Val
  1           5           10           15
Met Pro Gln Trp Arg Val Ser Ala Phe Ile Glu Asn Asn Ile Val Val
          20           25           30
Phe Glu Asn Phe Trp Glu Gly Leu Trp Met Asn Cys Val Arg Gln Ala
          35           40           45
Asn Ile Arg Met Gln Cys Lys Ile Tyr Asp Ser Leu Leu Ala Leu Ser
          50           55           60
Pro Asp Leu Gln Ala Ala Arg Gly Leu Met Cys Ala Ala Ser Val Met
          65           70           75           80
Ser Phe Leu Ala Phe Met Met Ala Ile Leu Gly Met Lys Cys Thr Arg
          85           90           95
Cys Thr Gly Asp Asn Glu Lys Val Lys Ala His Ile Leu Leu Thr Ala
          100          105          110
Gly Ile Ile Phe Ile Ile Thr Gly Met Val Val Leu Ile Pro Val Ser
          115          120          125
Trp Val Ala Asn Ala Ile Ile Arg Asp Phe Tyr Asn Ser Ile Val Asn
          130          135          140
Val Ala Gln Lys Arg Glu Leu Gly Glu Ala Leu Tyr Leu Gly Trp Thr
          145          150          155          160
Thr Ala Leu Val Leu Ile Val Gly Gly Ala Leu Phe Cys Cys Val Phe
          165          170          175
Cys Cys Asn Glu Lys Ser Ser Ser Tyr Arg Tyr Ser Ile Pro Ser His
          180          185          190
Arg Thr Thr Gln Lys Ser Tyr His Thr Gly Lys Lys Ser Pro Ser Val
          195          200          205
Tyr Ser Arg Ser Gln Tyr Val
          210          215

```

```

<210> 124
<211> 24
<212> PRT
<213> Homo sapiens

```

```

<400> 124
Leu Phe Leu Gly Gly Val Gly Met Val Gly Thr Val Ala Val Thr Val
  1           5           10           15
Met Pro Gln Trp Arg Val Ser Ala
          20

```

```

<210> 125

```

<211> 47
 <212> PRT
 <213> Homo sapiens

<400> 125
 Phe Ile Glu Asn Asn Ile Val Val Phe Glu Asn Phe Trp Glu Gly Leu
 1 5 10 15
 Trp Met Asn Cys Val Arg Gln Ala Asn Ile Arg Met Gln Cys Lys Ile
 20 25 30
 Tyr Asp Ser Leu Leu Ala Leu Ser Pro Asp Leu Gln Ala Ala Arg
 35 40 45

<210> 126
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 126
 Gly Leu Met Cys Ala Ala Ser Val Met Ser Phe Leu Ala Phe Met Met
 1 5 10 15
 Ala Ile Leu Gly Met
 20

<210> 127
 <211> 15
 <212> PRT
 <213> Homo sapiens

<400> 127
 Lys Cys Thr Arg Cys Thr Gly Asp Asn Glu Lys Val Lys Ala His
 1 5 10 15

<210> 128
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 128
 Ile Leu Leu Thr Ala Gly Ile Ile Phe Ile Ile Thr Gly Met Val Val
 1 5 10 15
 Leu Ile Pro Val Ser Trp Val Ala
 20

<210> 129
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 129
 Asn Ala Ile Ile Arg Asp Phe Tyr Asn Ser Ile Val Asn Val Ala Gln
 1 5 10 15
 Lys Arg Glu Leu Gly Glu
 20

<210> 130
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 130
 Ala Leu Tyr Leu Gly Trp Thr Thr Ala Leu Val Leu Ile Val Gly Gly
 1 5 10 15
 Ala Leu Phe Cys Cys Val Phe Cys Cys
 20 25

<210> 131
 <211> 37
 <212> PRT
 <213> Homo sapiens

<400> 131
 Asn Glu Lys Ser Ser Ser Tyr Arg Tyr Ser Ile Pro Ser His Arg Thr
 1 5 10 15
 Thr Gln Lys Ser Tyr His Thr Gly Lys Lys Ser Pro Ser Val Tyr Ser
 20 25 30
 Arg Ser Gln Tyr Val
 35

<210> 132
 <211> 225
 <212> PRT
 <213> Mus sp.

<400> 132
 Met Ala Thr Tyr Ala Leu Gln Met Ala Ala Leu Val Leu Gly Gly Val
 1 5 10 15
 Gly Met Val Gly Thr Val Ala Val Thr Ile Met Pro Gln Trp Arg Val
 20 25 30
 Ser Ala Phe Ile Glu Ser Asn Ile Val Val Phe Glu Asn Arg Trp Glu
 35 40 45
 Gly Leu Trp Met Asn Cys Met Arg His Ala Asn Ile Arg Met Gln Cys
 50 55 60
 Lys Val Tyr Asp Ser Leu Leu Ala Leu Ser Pro Asp Leu Gln Ala Ser
 65 70 75 80
 Arg Gly Leu Met Cys Ala Ala Ser Val Leu Ala Phe Leu Ala Phe Met
 85 90 95
 Thr Ala Ile Leu Gly Met Lys Cys Thr Arg Cys Thr Gly Asp Asp Glu
 100 105 110
 Asn Val Lys Ser Arg Ile Leu Leu Thr Ala Gly Ile Ile Phe Phe Ile
 115 120 125
 Thr Gly Leu Val Val Leu Ile Pro Val Ser Trp Val Ala Asn Ser Ile
 130 135 140
 Ile Arg Asp Phe Tyr Asn Pro Leu Val Asp Val Ala Leu Lys Arg Glu
 145 150 155 160
 Leu Gly Glu Ala Leu Tyr Ile Gly Trp Thr Thr Ala Leu Val Leu Ile
 165 170 175
 Ala Gly Gly Ala Leu Phe Cys Cys Val Phe Cys Cys Thr Glu Arg Ser

			180					185				190			
Asn	Ser	Tyr	Arg	Tyr	Ser	Val	Pro	Ser	His	Arg	Thr	Thr	Gln	Arg	Ser
		195					200					205			
Phe	His	Ala	Glu	Lys	Arg	Ser	Pro	Ser	Ile	Tyr	Ser	Lys	Ser	Gln	Tyr
	210					215					220				
Val															
225															

<210> 133
 <211> 678
 <212> PRT
 <213> Mus sp.

<400> 133

Ala	Thr	Gly	Gly	Cys	Ala	Ala	Cys	Cys	Thr	Ala	Cys	Gly	Cys	Thr	Cys
1				5					10					15	
Thr	Thr	Cys	Ala	Ala	Ala	Thr	Gly	Gly	Cys	Thr	Gly	Cys	Ala	Cys	Thr
			20					25					30		
Gly	Gly	Thr	Gly	Cys	Thr	Thr	Gly	Gly	Thr	Gly	Gly	Thr	Gly	Thr	Thr
		35					40					45			
Gly	Gly	Cys	Ala	Thr	Gly	Gly	Thr	Gly	Gly	Gly	Cys	Ala	Cys	Gly	Gly
	50					55					60				
Thr	Gly	Gly	Cys	Thr	Gly	Thr	Gly	Ala	Cys	Thr	Ala	Thr	Cys	Ala	Thr
65					70					75					80
Gly	Cys	Cys	Thr	Cys	Ala	Gly	Thr	Gly	Gly	Ala	Gly	Ala	Gly	Thr	Gly
				85					90					95	
Thr	Cys	Thr	Gly	Cys	Cys	Thr	Thr	Cys	Ala	Thr	Cys	Gly	Ala	Ala	Ala
			100					105					110		
Gly	Thr	Ala	Ala	Cys	Ala	Thr	Thr	Gly	Thr	Gly	Gly	Thr	Gly	Thr	Thr
		115					120					125			
Thr	Gly	Ala	Gly	Ala	Ala	Cys	Cys	Gly	Cys	Thr	Gly	Gly	Gly	Ala	Ala
	130					135					140				
Gly	Gly	Cys	Thr	Thr	Gly	Thr	Gly	Gly	Ala	Thr	Gly	Ala	Ala	Thr	Thr
145					150					155					160
Gly	Thr	Ala	Thr	Gly	Ala	Gly	Gly	Cys	Ala	Thr	Gly	Cys	Cys	Ala	Ala
				165					170					175	
Cys	Ala	Thr	Cys	Ala	Gly	Ala	Ala	Thr	Gly	Cys	Ala	Gly	Thr	Gly	Cys
			180					185					190		
Ala	Ala	Gly	Gly	Thr	Cys	Thr	Ala	Cys	Gly	Ala	Cys	Thr	Cys	Cys	Cys
	195						200					205			
Thr	Gly	Cys	Thr	Gly	Gly	Cys	Thr	Cys	Thr	Thr	Ala	Gly	Thr	Cys	Cys
	210					215					220				
Ala	Gly	Ala	Cys	Cys	Thr	Cys	Cys	Ala	Gly	Gly	Cys	Ala	Thr	Cys	Cys
225					230					235					240
Cys	Gly	Ala	Gly	Gly	Ala	Cys	Thr	Gly	Ala	Thr	Gly	Thr	Gly	Thr	Gly
				245					250					255	
Cys	Thr	Gly	Cys	Gly	Thr	Cys	Cys	Gly	Thr	Cys	Thr	Thr	Gly	Gly	Cys
			260					265					270		
Thr	Thr	Thr	Cys	Thr	Thr	Gly	Gly	Cys	Thr	Thr	Thr	Cys	Ala	Thr	Gly
		275				280						285			
Ala	Cys	Ala	Gly	Cys	Cys	Ala	Thr	Cys	Cys	Thr	Cys	Gly	Gly	Ala	Ala
	290					295					300				
Thr	Gly	Ala	Ala	Gly	Thr	Gly	Cys	Ala	Cys	Cys	Ala	Gly	Ala	Thr	Gly
305					310					315					320
Cys	Ala	Cys	Gly	Gly	Gly	Gly	Gly	Ala	Cys	Gly	Ala	Thr	Gly	Ala	Gly
				325					330					335	

Ala	Ala	Cys	Gly	Thr	Gly	Ala	Ala	Gly	Ala	Gly	Cys	Cys	Gly	Cys	Ala	
			340						345				350			
Thr	Cys	Thr	Thr	Gly	Cys	Thr	Gly	Ala	Cys	Ala	Gly	Cys	Cys	Gly	Gly	
		355					360					365				
Ala	Ala	Thr	Cys	Ala	Thr	Cys	Thr	Thr	Cys	Thr	Thr	Cys	Ala	Thr	Cys	
	370					375					380					
Ala	Cys	Cys	Gly	Gly	Cys	Thr	Thr	Gly	Gly	Thr	Thr	Gly	Thr	Gly	Cys	
385					390					395					400	
Thr	Cys	Ala	Thr	Cys	Cys	Cys	Thr	Gly	Thr	Cys	Ala	Gly	Cys	Thr	Gly	
			405					410						415		
Gly	Gly	Thr	Thr	Gly	Cys	Cys	Ala	Ala	Thr	Thr	Cys	Cys	Ala	Thr	Cys	
		420						425					430			
Ala	Thr	Cys	Ala	Gly	Ala	Gly	Ala	Cys	Thr	Thr	Cys	Thr	Ala	Cys	Ala	
	435						440					445				
Ala	Cys	Cys	Cys	Ala	Cys	Thr	Gly	Gly	Thr	Gly	Gly	Ala	Thr	Gly	Thr	
	450					455					460					
Gly	Gly	Cys	Cys	Cys	Thr	Ala	Ala	Ala	Gly	Cys	Gly	Cys	Gly	Ala	Gly	
465					470					475					480	
Cys	Thr	Gly	Gly	Gly	Ala	Gly	Ala	Ala	Gly	Cys	Cys	Cys	Thr	Cys	Thr	
			485						490					495		
Ala	Cys	Ala	Thr	Ala	Gly	Gly	Cys	Thr	Gly	Gly	Ala	Cys	Cys	Ala	Cys	
		500						505					510			
Ala	Gly	Cys	Gly	Cys	Thr	Gly	Gly	Thr	Gly	Cys	Thr	Gly	Ala	Thr	Cys	
	515					520						525				
Gly	Cys	Thr	Gly	Gly	Ala	Gly	Gly	Ala	Gly	Cys	Ala	Cys	Thr	Gly	Thr	
	530					535					540					
Thr	Cys	Thr	Gly	Thr	Thr	Gly	Thr	Gly	Thr	Gly	Thr	Thr	Thr	Thr	Gly	
545					550					555					560	
Thr	Thr	Gly	Thr	Ala	Cys	Thr	Gly	Ala	Ala	Gly	Gly	Ala	Gly	Cys		
			565					570						575		
Ala	Ala	Cys	Ala	Gly	Thr	Thr	Ala	Cys	Ala	Gly	Gly	Thr	Ala	Cys	Thr	
		580						585					590			
Cys	Gly	Gly	Thr	Ala	Cys	Cys	Ala	Thr	Cys	Cys	Cys	Ala	Thr	Cys	Gly	
	595						600					605				
Cys	Ala	Cys	Cys	Ala	Cys	Thr	Cys	Ala	Ala	Cys	Gly	Gly	Ala	Gly	Thr	
	610					615					620					
Thr	Thr	Cys	Cys	Ala	Cys	Gly	Cys	Cys	Gly	Ala	Ala	Ala	Ala	Gly	Ala	
625					630					635					640	
Gly	Ala	Thr	Cys	Thr	Cys	Cys	Gly	Ala	Gly	Cys	Ala	Thr	Ala	Thr	Ala	
			645						650					655		
Cys	Thr	Cys	Cys	Ala	Ala	Ala	Ala	Gly	Thr	Cys	Ala	Gly	Thr	Ala	Thr	
		660						665					670			
Gly	Thr	Gly	Thr	Ala	Gly											
		675														

<210> 134
 <211> 1090
 <212> PRT
 <213> Homo sapiens

<400> 134
 Gly Gly Gly Gly Cys Ala Gly Ala Ala Thr Gly Ala Gly Ala Thr Ala
 1 5 10 15
 Thr Thr Ala Ala Cys Cys Cys Ala Ala Thr Gly Cys Thr Thr Thr
 20 25 30
 Gly Ala Thr Thr Gly Thr Thr Cys Thr Ala Gly Ala Ala Ala Gly Thr

		35				40				45					
Ala	Thr	Ala	Gly	Thr	Ala	Ala	Thr	Thr	Thr	Gly	Thr	Thr	Thr	Thr	Cys
	50					55					60				
Thr	Ala	Ala	Gly	Gly	Thr	Gly	Gly	Thr	Thr	Cys	Ala	Ala	Gly	Cys	Ala
65					70					75					80
Thr	Cys	Thr	Ala	Cys	Thr	Cys	Thr	Thr	Thr	Thr	Thr	Ala	Thr	Cys	Ala
				85					90					95	
Thr	Thr	Thr	Ala	Cys	Thr	Thr	Cys	Ala	Ala	Ala	Ala	Thr	Gly	Ala	Cys
			100					105					110		
Ala	Thr	Thr	Gly	Cys	Thr	Ala	Ala	Ala	Gly	Ala	Cys	Thr	Gly	Cys	Ala
			115					120					125		
Thr	Thr	Ala	Thr	Thr	Thr	Thr	Ala	Cys	Thr	Ala	Cys	Thr	Gly	Thr	Ala
			130					135					140		
Ala	Thr	Thr	Thr	Cys	Thr	Cys	Cys	Ala	Cys	Gly	Ala	Cys	Ala	Thr	Ala
145					150					155					160
Gly	Cys	Ala	Thr	Thr	Ala	Thr	Gly	Thr	Ala	Cys	Ala	Thr	Ala	Gly	Ala
				165					170					175	
Thr	Gly	Ala	Gly	Thr	Gly	Thr	Ala	Ala	Cys	Ala	Thr	Thr	Thr	Ala	Thr
			180					185						190	
Ala	Thr	Cys	Thr	Cys	Ala	Cys	Ala	Thr	Ala	Gly	Ala	Gly	Ala	Cys	Ala
			195					200					205		
Thr	Gly	Cys	Thr	Thr	Ala	Thr	Ala	Thr	Gly	Gly	Thr	Thr	Thr	Thr	Ala
			210					215					220		
Thr	Thr	Thr	Ala	Ala	Ala	Ala	Thr	Gly	Ala	Ala	Ala	Thr	Gly	Cys	Cys
225					230					235					240
Ala	Gly	Thr	Cys	Cys	Ala	Thr	Thr	Ala	Cys	Ala	Cys	Thr	Gly	Ala	Ala
				245					250					255	
Thr	Ala	Ala	Ala	Thr	Ala	Gly	Ala	Ala	Cys	Thr	Cys	Ala	Ala	Cys	Thr
			260					265						270	
Ala	Thr	Thr	Gly	Cys	Thr	Thr	Thr	Thr	Cys	Ala	Gly	Gly	Gly	Ala	Ala
			275					280					285		
Ala	Thr	Cys	Ala	Thr	Gly	Gly	Ala	Thr	Ala	Gly	Gly	Gly	Thr	Thr	Gly
		290				295				300					
Ala	Ala	Gly	Ala	Ala	Gly	Gly	Thr	Thr	Ala	Cys	Thr	Ala	Thr	Thr	Ala
305					310					315					320
Ala	Thr	Thr	Gly	Thr	Thr	Thr	Thr	Ala	Ala	Ala	Ala	Ala	Cys	Ala	Gly
				325					330					335	
Cys	Thr	Thr	Ala	Gly	Gly	Gly	Ala	Thr	Thr	Ala	Ala	Thr	Gly	Thr	Cys
			340					345						350	
Cys	Thr	Cys	Cys	Ala	Thr	Thr	Thr	Ala	Thr	Ala	Ala	Thr	Gly	Ala	Ala
			355					360					365		
Gly	Ala	Thr	Thr	Ala	Ala	Ala	Ala	Thr	Gly	Ala	Ala	Gly	Gly	Cys	Thr
			370					375					380		
Thr	Thr	Ala	Ala	Thr	Cys	Ala	Gly	Cys	Ala	Thr	Thr	Gly	Thr	Ala	Ala
385					390					395					400
Ala	Gly	Gly	Ala	Ala	Ala	Thr	Thr	Gly	Ala	Ala	Thr	Gly	Gly	Cys	Thr
				405					410					415	
Thr	Thr	Cys	Thr	Gly	Ala	Thr	Ala	Thr	Gly	Cys	Thr	Gly	Thr	Thr	Thr
			420					425					430		
Thr	Thr	Thr	Ala	Gly	Cys	Cys	Thr	Ala	Gly	Gly	Ala	Gly	Thr	Thr	Ala
			435					440					445		
Gly	Ala	Ala	Ala	Thr	Cys	Cys	Thr	Ala	Ala	Cys	Thr	Thr	Cys	Thr	Thr
			450					455					460		
Thr	Ala	Thr	Cys	Cys	Thr	Cys	Thr	Thr	Cys	Thr	Cys	Cys	Cys	Ala	Gly
465					470					475					480
Ala	Gly	Gly	Cys	Thr	Thr	Thr	Thr	Thr	Thr	Thr	Thr	Thr	Cys	Thr	Thr

Thr	Thr	Cys	Thr	Gly	Thr	Thr	Thr	Ala	Thr	Thr	Cys	Cys	Ala	Ala	Ala
945					950					955					960
Thr	Thr	Thr	Gly	Ala	Thr	Gly	Ala	Ala	Ala	Cys	Thr	Gly	Ala	Cys	Ala
				965						970					975
Ala	Thr	Cys	Cys	Ala	Ala	Thr	Thr	Thr	Gly	Ala	Ala	Ala	Gly	Thr	Thr
			980					985					990		
Thr	Gly	Thr	Gly	Thr	Cys	Gly	Ala	Cys	Gly	Thr	Cys	Thr	Gly	Thr	Cys
		995					1000					1005			
Thr	Ala	Gly	Cys	Thr	Thr	Ala	Ala	Ala	Thr	Gly	Ala	Ala	Thr	Gly	Thr
	1010					1015					1020				
Gly	Thr	Thr	Cys	Thr	Ala	Thr	Thr	Thr	Gly	Cys	Thr	Thr	Thr	Ala	Thr
1025					1030					1035					1040
Ala	Cys	Ala	Thr	Thr	Ala	Thr	Ala	Thr	Thr	Ala	Ala	Thr	Ala	Ala	
				1045					1050					1055	
Ala	Thr	Thr	Gly	Thr	Ala	Cys	Ala	Thr	Thr	Thr	Thr	Thr	Cys	Cys	Ala
			1060					1065					1070		
Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala
			1075					1080					1085		
Ala	Ala														
	1090														

<210> 135
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 135

Met	Ala	Ser	Met	Gly	Leu	Gln	Val	Met	Gly	Ile	Ala	Leu	Ala	Val	Leu
1				5					10					15	
Gly	Trp	Leu	Ala	Val	Met	Leu	Cys	Cys	Ala	Leu	Pro	Met	Trp	Arg	Val
			20					25					30		
Thr	Ala	Phe	Ile	Gly	Ser	Asn	Ile	Val	Thr	Ser	Gln	Thr	Ile	Trp	Glu
		35				40						45			
Gly	Leu	Trp	Met	Asn	Cys	Val	Val	Gln	Ser	Thr	Gly	Gln	Met	Gln	Cys
	50				55						60				
Lys	Val	Tyr	Asp	Ser	Leu	Leu	Ala	Leu	Pro	Gln	Asp	Leu	Gln	Ala	Ala
65					70					75					80
Arg	Ala	Leu	Val	Ile	Ile	Ser	Ile	Ile	Val	Ala	Ala	Leu	Gly	Val	Leu
				85					90					95	
Leu	Ser	Val	Val	Gly	Gly	Lys	Cys	Thr	Asn	Cys	Leu	Glu	Asp	Glu	Ser
			100					105					110		
Ala	Lys	Ala	Lys	Thr	Met	Ile	Val	Ala	Gly	Val	Val	Phe	Leu	Leu	Ala
		115					120					125			
Gly	Leu	Met	Val	Ile	Val	Pro	Val	Ser	Trp	Thr	Ala	His	Asn	Ile	Ile
	130					135					140				
Gln	Asp	Phe	Tyr	Asn	Pro	Leu	Val	Ala	Ser	Gly	Gln	Lys	Arg	Glu	Met
145					150					155					160
Gly	Ala	Ser	Leu	Tyr	Val	Gly	Trp	Ala	Ala	Ser	Gly	Leu	Leu	Leu	Leu
				165				170						175	
Gly	Gly	Gly	Leu	Leu	Cys	Cys	Asn	Cys	Pro	Pro	Arg	Thr	Asp	Lys	Pro
			180				185						190		
Tyr	Ser	Ala	Lys	Tyr	Ser	Ala	Ala	Arg	Ser	Ala	Ala	Ala	Ser	Asn	Tyr
		195					200						205		
Val															

<210> 136
 <211> 210
 <212> PRT
 <213> Mus sp.

<400> 136
 Met Ala Ser Met Gly Leu Gln Val Leu Gly Ile Ser Leu Ala Val Leu
 1 5 10 15
 Gly Trp Leu Gly Ile Ile Leu Ser Cys Ala Leu Pro Met Trp Arg Val
 20 25 30
 Thr Ala Phe Ile Gly Ser Asn Ile Val Thr Ala Gln Thr Ser Trp Glu
 35 40 45
 Gly Leu Trp Met Asn Cys Val Val Gln Ser Thr Gly Gln Met Gln Cys
 50 55 60
 Lys Met Tyr Asp Ser Met Leu Ala Leu Pro Gln Asp Leu Gln Ala Ala
 65 70 75 80
 Arg Ala Leu Met Val Ile Ser Ile Ile Val Gly Ala Leu Gly Met Leu
 85 90 95
 Leu Ser Val Val Gly Gly Lys Cys Thr Asn Cys Met Glu Asp Glu Thr
 100 105 110
 Val Lys Ala Lys Ile Met Ile Thr Ala Gly Ala Val Phe Ile Val Ala
 115 120 125
 Ser Met Leu Ile Met Val Pro Val Ser Trp Thr Ala His Asn Val Ile
 130 135 140
 Arg Asp Phe Tyr Asn Pro Met Val Ala Ser Gly Gln Lys Arg Glu Met
 145 150 155 160
 Gly Ala Ser Leu Tyr Val Gly Trp Ala Ala Ser Gly Leu Leu Leu Leu
 165 170 175
 Gly Gly Gly Leu Leu Cys Cys Ser Cys Pro Pro Arg Ser Asn Asp Lys
 180 185 190
 Pro Tyr Ser Ala Lys Tyr Ser Ala Ala Arg Ser Val Pro Ala Ser Asn
 195 200 205
 Tyr Val
 210

<210> 137
 <211> 248
 <212> PRT
 <213> Rattus sp.

<400> 137
 Met Ser Met Ser Leu Glu Ile Thr Gly Thr Ser Leu Ala Val Leu Gly
 1 5 10 15
 Trp Leu Cys Thr Ile Val Cys Cys Ala Leu Pro Met Trp Arg Val Ser
 20 25 30
 Ala Phe Ile Gly Ser Ser Ile Ile Thr Ala Gln Ile Thr Trp Glu Gly
 35 40 45
 Leu Trp Met Asn Cys Val Gln Ser Thr Gly Gln Met Gln Cys Lys Met
 50 55 60
 Tyr Asp Ser Leu Leu Ala Leu Pro Gln Asp Leu Gln Ala Ala Arg Ala
 65 70 75 80
 Leu Ile Val Val Ser Ile Leu Leu Ala Ala Phe Gly Leu Leu Val Ala
 85 90 95
 Leu Val Gly Ala Gln Cys Thr Asn Cys Val Gln Asp Glu Thr Ala Lys

<223> Unknown

<400> 139
000

<210> 140

<220>

<223> Unknown

<400> 140
000

<210> 141
<211> 323
<212> DNA
<213> Homo sapiens

<400> 141
cgagcgggccg cccggggcagg tcagacatgg gcccaaggagc cagaggccgt ccgggggtctg 60
tgagttgagc ttgaggccgc aggatgaggg tcatcatggg gatagccagc ctgggggttcc 120
tctgggcagt attcctgctt cctcttgtgt ttgggggtccc cacagaggag actacctttg 180
gagaatctgt ggcctcccat ctcccaaag gctgtcgacg atgctgtgac cccgaggacc 240
tgatgtcctc tgatgatacg gtccaggccc ctgtttcccc ttatgtcctg cctgaagtca 300
ggccgtacct cggccgcgac cac 323

<210> 142
<211> 240
<212> DNA
<213> Homo sapiens

<400> 142
atgagggtca tcatggggat agccagcctg gggttcctct gggcagtatt cctgcttcct 60
cttgtgtttg ggggtccccac agaggagact acctttggag aatctgtggc ctcccatctc 120
cccaaaggct gtcgacgatg ctgtgacccc gaggacctga tgtcctctga tgatacggtc 180
caggccccctg tttcccctta tgtcctgcct gaagtcaggc cgtacctcgg ccgcgaccac 240

<210> 143
<211> 80
<212> PRT
<213> Homo sapiens

<400> 143
Met Arg Val Ile Met Gly Ile Ala Ser Leu Gly Phe Leu Trp Ala Val
1 5 10 15
Phe Leu Leu Pro Leu Val Phe Gly Val Pro Thr Glu Glu Thr Thr Phe
20 25 30
Gly Glu Ser Val Ala Ser His Leu Pro Lys Gly Cys Arg Arg Cys Cys
35 40 45
Asp Pro Glu Asp Leu Met Ser Ser Asp Asp Thr Val Gln Ala Pro Val
50 55 60
Ser Pro Tyr Val Leu Pro Glu Val Arg Pro Tyr Leu Gly Arg Asp His
65 70 75 80

<210> 144

<211> 24
<212> PRT
<213> Homo sapiens

<400> 144
Met Arg Val Ile Met Gly Ile Ala Ser Leu Gly Phe Leu Trp Ala Val
1 5 10 15
Phe Leu Leu Pro Leu Val Phe Gly
20

<210> 145
<211> 56
<212> PRT
<213> Homo sapiens

<400> 145
Val Pro Thr Glu Glu Thr Thr Phe Gly Glu Ser Val Ala Ser His Leu
1 5 10 15
Pro Lys Gly Cys Arg Arg Cys Cys Asp Pro Glu Asp Leu Met Ser Ser
20 25 30
Asp Asp Thr Val Gln Ala Pro Val Ser Pro Tyr Val Leu Pro Glu Val
35 40 45
Arg Pro Tyr Leu Gly Arg Asp His
50 55

<210> 146
<220>
<223> Unknown

<400> 146
000

<210> 147
<220>
<223> Unknown

<400> 147
000

<210> 148
<220>
<223> Unknown

<400> 148
000

<210> 149
<220>
<223> Unknown

<400> 149

000

<210> 150

<220>

<223> Unknown

<400> 150

000

<210> 151

<211> 546

<212> DNA

<213> Homo sapiens

<400> 151

```
cggacgcgtg ggcggacgcg tgggggttatt tctttggttg ttaggtataa tatgggcatt 60
taaaaacaac acccagtttt gtacttgtat aagtatggaa ttcttatata ggattgttgt 120
tggtttcatt cttatcttta ctttttttaa tattaaggga cagaatacca agtgtccaat 180
gtcttggtat tatattgtta ggggtactggg cactttgggg atattgactg tattctgggt 240
ttgccccctc actattttta atccagacta ttttatacct atcagtataa ctatagttct 300
tactcttctt cttggaattc tttttcttat tggtttattat gggagttttc acccaaacag 360
aagtgcagaa acaaaatgtg atgaaattga tggaaaacca gttctaagag aatgtagaat 420
gagatatttc ctaatggaat aagctattca tttatgatat atattttctt atattttgtt 480
tcattgggta gtaaagaaaa tgtgtgttaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 540
aaaaaa                                           546
```

<210> 152

<211> 345

<212> DNA

<213> Homo sapiens

<400> 152

```
atggaattct tatataggat tggtgttgga ttcattctta tctttacatt ttttaatat 60
aagggacaga ataccaagtg tccaatgtct tgttattata ttggttaggg actgggcact 120
ttggggatat tgactgtatt ctggggttgc cccctcacta tttttaatcc agactatttt 180
atacctatca gtataactat agttcttact cttcttcttg gaattctttt tcttattgtt 240
tattatggga gttttcaccc aaacagaagt gcagaaacaa aatgtgatga aattgatgga 300
aaaccagttc taagagaatg tagaatgaga tatttcctaa tggaa                                           345
```

<210> 153

<211> 115

<212> PRT

<213> Homo sapiens

<400> 153

```
Met Glu Phe Leu Tyr Arg Ile Val Val Gly Phe Ile Leu Ile Phe Thr
 1           5           10           15
Phe Phe Asn Ile Lys Gly Gln Asn Thr Lys Cys Pro Met Ser Cys Tyr
      20           25           30

Tyr Ile Val Arg Val Leu Gly Thr Leu Gly Ile Leu Thr Val Phe Trp
      35           40           45
Val Cys Pro Leu Thr Ile Phe Asn Pro Asp Tyr Phe Ile Pro Ile Ser
      50           55           60
Ile Thr Ile Val Leu Thr Leu Leu Gly Ile Leu Phe Leu Ile Val
```

65					70					75					80
Tyr	Tyr	Gly	Ser	Phe	His	Pro	Asn	Arg	Ser	Ala	Glu	Thr	Lys	Cys	Asp
				85					90					95	
Glu	Ile	Asp	Gly	Lys	Pro	Val	Leu	Arg	Glu	Cys	Arg	Met	Arg	Tyr	Phe
			100					105						110	
Leu	Met	Glu													
		115													

<210> 154
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 154															
Met	Glu	Phe	Leu	Tyr	Arg	Ile	Val	Val	Gly	Phe	Ile	Leu	Ile	Phe	Thr
1				5					10					15	
Phe	Phe	Asn	Ile	Lys	Gly										
			20												

<210> 155
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 155															
Gln	Asn	Thr	Lys	Cys	Pro	Met	Ser	Cys	Tyr	Tyr	Ile	Val	Arg	Val	Leu
1				5					10					15	
Gly	Thr	Leu	Gly	Ile	Leu	Thr	Val	Phe	Trp	Val	Cys	Pro	Leu	Thr	Ile
			20					25					30		
Phe	Asn	Pro	Asp	Tyr	Phe	Ile	Pro	Ile	Ser	Ile	Thr	Ile	Val	Leu	Thr
		35					40				45				
Leu	Leu	Leu	Gly	Ile	Leu	Phe	Leu	Ile	Val	Tyr	Tyr	Gly	Ser	Phe	His
	50				55					60					
Pro	Asn	Arg	Ser	Ala	Glu	Thr	Lys	Cys	Asp	Glu	Ile	Asp	Gly	Lys	Pro
65					70				75					80	
Val	Leu	Arg	Glu	Cys	Arg	Met	Arg	Tyr	Phe	Leu	Met	Glu			
				85					90						

<210> 156
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 156								
Gln	Asn	Thr	Lys	Cys	Pro	Met	Ser	Cys
1				5				

<210> 157
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 157

Tyr Tyr Ile Val Arg Val Leu Gly Thr Leu Gly Ile Leu Thr Val Phe
 1 5 10 15
 Trp Val

<210> 158
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 158
 Cys Pro Leu Thr Ile Phe Asn Pro Asp
 1 5

<210> 159
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 159
 Tyr Phe Ile Pro Ile Ser Ile Thr Ile Val Leu Thr Leu Leu Leu Gly
 1 5 10 15
 Ile Leu Phe Leu Ile Val Tyr Tyr
 20

<210> 160
 <211> 33
 <212> PRT
 <213> Homo sapiens

<400> 160
 Gly Ser Phe His Pro Asn Arg Ser Ala Glu Thr Lys Cys Asp Glu Ile
 1 5 10 15
 Asp Gly Lys Pro Val Leu Arg Glu Cys Arg Met Arg Tyr Phe Leu Met
 20 25 30
 Glu

<210> 161
 <220>
 <223> Unknown

<400> 161
 000

<210> 162

<220>
 <223> Unknown

<400> 162
 000

<210> 163
<220>
<223> Unknown
<400> 163
000
<210> 164
<220>
<223> Unknown
<400> 164
000
<210> 165
<220>
<223> Unknown
<400> 165
000
<210> 166
<220>
<223> Unknown
<400> 166
000
<210> 167
<220>
<223> Unknown
<400> 167
000
<210> 168
<220>
<223> Unknown
<400> 168
000
<210> 169
<220>
<223> Unknown
<400> 169
000

<210> 170

<220>

<223> Unknown

<400> 170

000

<210> 171

<211> 1684

<212> DNA

<213> Homo sapiens

<400> 171

```
cggacgcggt gggcggacgc gtgggcagct gaagaaagag aggaatgaag cgccttctgc 60
ttctgttttt gttctttata acattttctt ctgcatttcc cttagtccgg atgacggaaa 120
atgaagaaaa tatgcaactg gctcaggcat atctcaacca gttctactct cttgaaatag 180
aagggaatca tcttggtcaa agcaagaata ggagtctcat agatgacaaa attcgggaaa 240
tgcaagcatt ttttggattg acagtgactg gaaaactgga ctcaaacacc cttgagatca 300
tgaagacacc caggtgtggg gtgcctgatg tgggccagta tggctacacc ctccctgggt 360
ggagaaaata caacctcacc tacagaataa taaactatac tccggatatg gcacgagctg 420
ctgtggatga ggctatccaa gaaggtttag aagtgtggag caaagtcact ccactaaaat 480
tcaccaagat ttcaaagggg attgcagaca tcatgattgc ctttaggact cgagtccatg 540
gtcgggtgcc tcgctatttt gatggctcct tgggagtgtt tggccatgcc tttcctcctg 600
gtccgggtct ggggtgtgac actcattttg atgaggatga aaactggacc aaggatggag 660
caggattcaa cttgtttctt gtggctgtct atgaatttgg tcatgcactg gggctctctc 720
actccaatga tcaaacagcc ttgatgttcc caaattatgt ctccctggat cccagaaaat 780
accacttttc tcaggatgat atcaatggaa tccagtccat ctatggaggt ctgcctaagg 840
tacctgctaa gccaaaggaa cccactatac cccatgcctg tgaccctgac ttgacttttg 900
acgctatcac aactttccgc agagaagtaa tgttctttaa aggcaggcac ctatggagga 960
tctattatga tatcacgat gttgagtttg aattaattgc ttcattctgg ccactctctg 1020
cagctgatct gcaagctgca tacgagaacc ccagagataa gattctgggt tttaaagatg 1080
aaaacttctg gatgatcaga ggatagtctg tcttgccaga ttatcccaa tccatccata 1140
cattaggttt tccaggacgt gtgaagaaaa tagatgcagc cgtctgtgat aagaccacaa 1200
gaaaaaccta cttctttgtg ggcatttggt gctggaggtt tgatgaaatg acccaaacca 1260
tggaacaaagg attcccgcag agagtggtaa aacactttcc tggaatcagt atccgtgttg 1320
atgctgtctt ccagtacaaa ggattcttct ttttcagccg tggatcaaaag caatttgaat 1380
acaacattaa gacaaagaat attaccgaa tcatgagaac taatacttgg tttcaatgca 1440
aagaacaaaa gaactcctca tttggttttg atatcaacaa ggaaaaagca cattcaggag 1500
gcataaagat attgtatcat aagagtttaa gcttgtttat ttttggtatt gttcatttgc 1560
tgaaaaacac ttctattttat caataaattc atagacctaa aataaacctc aacaggtctt 1620
ttaatataaa ttctgcttca aatagaata aaaccattct ttaacaacaa aaaaaaaaaa 1680
aaaa 1684
```

<210> 172

<211> 1542

<212> DNA

<213> Homo sapiens

<400> 172

```
atgaagcgcc ttctgcttct gtttttgttc tttataacat tttcttctgc atttccctta 60
gtccggatga cggaaaatga agaaaatatg caactggctc aggcatactt caaccagttc 120
tactctcttg aaatagaagg gaatcatctt gttcaaagca agaataaggag tctcatagat 180
gacaaaattc gggaaatgca agcatttttt ggattgacag tgactggaaa actggactca 240
aacacccttg agatcatgaa gacaccaggt tgtgggggtg ctgatgtggg ccagtatggc 300
tacaccctcc ctgggtggag aaaatacaac ctcacctaca gaataataaa ctatactccg 360
gatatggcac gagctgctgt ggatgaggct atccaagaag gtttagaagt gtggagcaaa 420
```

```

gtcactccac taaaattcac caagatttca aaggggattg cagacatcat gattgccttt 480
aggactcgag tccatggteg gtgtcctcgc tattttgatg gtcccttggg agtgcttggc 540
catgcctttc ctcttggtcc gggctctgggt ggtgacactc attttgatga ggatgaaaac 600
tggaccaagg atggagcagg attcaacttg tttcttgggg ctgctcatga atttgggtcat 660
gcactggggc tctctcactc caatgatcaa acagccttga tgttcccaaa ttatgtctcc 720
ctggatccca gaaaataccc acttttctcag gatgatata atggaatcca gtccatctat 780
ggaggtctgc ctaaggtacc tgctaagcca aaggaaccca ctatacccca tgctgtgac 840
cctgacttga cttttgacgc tatcacaact ttccgcagag aagtaatgtt ctttaaaggc 900
aggcacctat ggaggatcta ttatgatata acggatgttg agtttgaatt aattgcttca 960
ttctggccat ctctgccagc tgatctgcaa gctgcatacg agaaccocag agataagatt 1020
ctggttttta aagatgaaaa cttctggatg atcagaggat atgctgtctt gccagattat 1080
cccaaatacca tccatacatt aggtttttcca ggacgtgtga agaaaataga tgcagccgctc 1140
tgtgataaga ccacaagaaa aacctacttc tttgtgggca tttgggtgctg gaggtttgat 1200
gaaatgaccc aaaccatgga caaaggattc ccgcagagag tggtaaaaca ctttcctgga 1260
atcagtatcc gtgttgatgc tgctttccag taaaaggat tcttcttttt cagccgtgga 1320
tcaaagcaat ttgaatacaa cattaagaca aagaatatta cccgaatcat gagaactaat 1380
acttggtttc aatgcaaaga accaaagaac tcctcatttg gttttgatat caacaaggaa 1440
aaagcacatt caggaggcat aaagatatgt tatcataaga gtttaagctt gtttattttt 1500
ggtattgttc atttgcgtgaa aaacacttct atttatcaat aa 1542

```

<210> 173

<211> 513

<212> PRT

<213> Homo sapiens

<400> 173

```

Met Lys Arg Leu Leu Leu Phe Leu Phe Phe Ile Thr Phe Ser Ser
 1          5          10          15
Ala Phe Pro Leu Val Arg Met Thr Glu Asn Glu Glu Asn Met Gln Leu
 20          25          30
Ala Gln Ala Tyr Leu Asn Gln Phe Tyr Ser Leu Glu Ile Glu Gly Asn
 35          40          45
His Leu Val Gln Ser Lys Asn Arg Ser Leu Ile Asp Asp Lys Ile Arg
 50          55          60
Glu Met Gln Ala Phe Phe Gly Leu Thr Val Thr Gly Lys Leu Asp Ser
 65          70          75          80
Asn Thr Leu Glu Ile Met Lys Thr Pro Arg Cys Gly Val Pro Asp Val
 85          90          95
Gly Gln Tyr Gly Tyr Thr Leu Pro Gly Trp Arg Lys Tyr Asn Leu Thr
100          105          110
Tyr Arg Ile Ile Asn Tyr Thr Pro Asp Met Ala Arg Ala Ala Val Asp
115          120          125
Glu Ala Ile Gln Glu Gly Leu Glu Val Trp Ser Lys Val Thr Pro Leu
130          135          140
Lys Phe Thr Lys Ile Ser Lys Gly Ile Ala Asp Ile Met Ile Ala Phe
145          150          155          160
Arg Thr Arg Val His Gly Arg Cys Pro Arg Tyr Phe Asp Gly Pro Leu
165          170          175
Gly Val Leu Gly His Ala Phe Pro Pro Gly Pro Gly Leu Gly Gly Asp
180          185          190
Thr His Phe Asp Glu Asp Glu Asn Trp Thr Lys Asp Gly Ala Gly Phe
195          200          205
Asn Leu Phe Leu Val Ala Ala His Glu Phe Gly His Ala Leu Gly Leu
210          215          220
Ser His Ser Asn Asp Gln Thr Ala Leu Met Phe Pro Asn Tyr Val Ser
225          230          235          240
Leu Asp Pro Arg Lys Tyr Pro Leu Ser Gln Asp Asp Ile Asn Gly Ile

```

				245					250				255				
Gln	Ser	Ile	Tyr	Gly	Gly	Leu	Pro	Lys	Val	Pro	Ala	Lys	Pro	Lys	Glu		
			260					265					270				
Pro	Thr	Ile	Pro	His	Ala	Cys	Asp	Pro	Asp	Leu	Thr	Phe	Asp	Ala	Ile		
		275					280					285					
Thr	Thr	Phe	Arg	Arg	Glu	Val	Met	Phe	Phe	Lys	Gly	Arg	His	Leu	Trp		
	290				295						300						
Arg	Ile	Tyr	Tyr	Asp	Ile	Thr	Asp	Val	Glu	Phe	Glu	Leu	Ile	Ala	Ser		
305				310					315						320		
Phe	Trp	Pro	Ser	Leu	Pro	Ala	Asp	Leu	Gln	Ala	Ala	Tyr	Glu	Asn	Pro		
			325					330						335			
Arg	Asp	Lys	Ile	Leu	Val	Phe	Lys	Asp	Glu	Asn	Phe	Trp	Met	Ile	Arg		
		340					345						350				
Gly	Tyr	Ala	Val	Leu	Pro	Asp	Tyr	Pro	Lys	Ser	Ile	His	Thr	Leu	Gly		
	355				360						365						
Phe	Pro	Gly	Arg	Val	Lys	Lys	Ile	Asp	Ala	Ala	Val	Cys	Asp	Lys	Thr		
	370				375				380								
Thr	Arg	Lys	Thr	Tyr	Phe	Phe	Val	Gly	Ile	Trp	Cys	Trp	Arg	Phe	Asp		
385				390				395						400			
Glu	Met	Thr	Gln	Thr	Met	Asp	Lys	Gly	Phe	Pro	Gln	Arg	Val	Val	Lys		
			405					410					415				
His	Phe	Pro	Gly	Ile	Ser	Ile	Arg	Val	Asp	Ala	Ala	Phe	Gln	Tyr	Lys		
		420					425					430					
Gly	Phe	Phe	Phe	Phe	Ser	Arg	Gly	Ser	Lys	Gln	Phe	Glu	Tyr	Asn	Ile		
	435				440						445						
Lys	Thr	Lys	Asn	Ile	Thr	Arg	Ile	Met	Arg	Thr	Asn	Thr	Trp	Phe	Gln		
	450				455				460								
Cys	Lys	Glu	Pro	Lys	Asn	Ser	Ser	Phe	Gly	Phe	Asp	Ile	Asn	Lys	Glu		
465				470				475						480			
Lys	Ala	His	Ser	Gly	Gly	Ile	Lys	Ile	Leu	Tyr	His	Lys	Ser	Leu	Ser		
			485					490						495			
Leu	Phe	Ile	Phe	Gly	Ile	Val	His	Leu	Leu	Lys	Asn	Thr	Ser	Ile	Tyr		
		500					505					510					

Gln

<210> 174
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 174
 Met Lys Arg Leu Leu Leu Leu Phe Leu Phe Phe Ile Thr Phe Ser Ser
 1 5 10 15
 Ala

<210> 175
 <211> 291
 <212> PRT
 <213> Homo sapiens

<400> 175
 Phe Pro Leu Val Arg Met Thr Glu Asn Glu Glu Asn Met Gln Leu Ala
 1 5 10 15

Gln	Ala	Tyr	Leu	Asn	Gln	Phe	Tyr	Ser	Leu	Glu	Ile	Glu	Gly	Asn	His		
			20					25					30				
Leu	Val	Gln	Ser	Lys	Asn	Arg	Ser	Leu	Ile	Asp	Asp	Lys	Ile	Arg	Glu		
		35					40					45					
Met	Gln	Ala	Phe	Phe	Gly	Leu	Thr	Val	Thr	Gly	Lys	Leu	Asp	Ser	Asn		
		50				55					60						
Thr	Leu	Glu	Ile	Met	Lys	Thr	Pro	Arg	Cys	Gly	Val	Pro	Asp	Val	Gly		
65					70					75					80		
Gln	Tyr	Gly	Tyr	Thr	Leu	Pro	Gly	Trp	Arg	Lys	Tyr	Asn	Leu	Thr	Tyr		
				85				90						95			
Arg	Ile	Ile	Asn	Tyr	Thr	Pro	Asp	Met	Ala	Arg	Ala	Ala	Val	Asp	Glu		
			100					105						110			
Ala	Ile	Gln	Glu	Gly	Leu	Glu	Val	Trp	Ser	Lys	Val	Thr	Pro	Leu	Lys		
		115					120					125					
Phe	Thr	Lys	Ile	Ser	Lys	Gly	Ile	Ala	Asp	Ile	Met	Ile	Ala	Phe	Arg		
		130				135					140						
Thr	Arg	Val	His	Gly	Arg	Cys	Pro	Arg	Tyr	Phe	Asp	Gly	Pro	Leu	Gly		
145					150					155					160		
Val	Leu	Gly	His	Ala	Phe	Pro	Pro	Gly	Pro	Gly	Leu	Gly	Gly	Asp	Thr		
				165				170						175			
His	Phe	Asp	Glu	Asp	Glu	Asn	Trp	Thr	Lys	Asp	Gly	Ala	Gly	Phe	Asn		
		180					185						190				
Leu	Phe	Leu	Val	Ala	Ala	His	Glu	Phe	Gly	His	Ala	Leu	Gly	Leu	Ser		
		195					200					205					
His	Ser	Asn	Asp	Gln	Thr	Ala	Leu	Met	Phe	Pro	Asn	Tyr	Val	Ser	Leu		
		210				215					220						
Asp	Pro	Arg	Lys	Tyr	Pro	Leu	Ser	Gln	Asp	Asp	Ile	Asn	Gly	Ile	Gln		
225					230					235					240		
Ser	Ile	Tyr	Gly	Gly	Leu	Pro	Lys	Val	Pro	Ala	Lys	Pro	Lys	Glu	Pro		
				245				250						255			
Thr	Ile	Pro	His	Ala	Cys	Asp	Pro	Asp	Leu	Thr	Phe	Asp	Ala	Ile	Thr		
			260					265						270			
Thr	Phe	Arg	Arg	Glu	Val	Met	Phe	Phe	Lys	Gly	Arg	His	Leu	Trp	Arg		
		275					280					285					
Ile	Tyr	Tyr															
		290															

<210> 176
 <211> 467
 <212> PRT
 <213> Homo sapiens

<400> 176

Met	Phe	Ser	Leu	Lys	Thr	Leu	Pro	Phe	Leu	Leu	Leu	Leu	His	Val	Gln		
1				5					10					15			
Ile	Ser	Lys	Ala	Phe	Pro	Val	Ser	Ser	Lys	Glu	Lys	Asn	Thr	Lys	Thr		
			20					25					30				
Val	Gln	Asp	Tyr	Leu	Glu	Lys	Phe	Tyr	Gln	Leu	Pro	Ser	Asn	Gln	Tyr		
			35				40					45					
Gln	Ser	Thr	Arg	Lys	Asn	Gly	Thr	Asn	Val	Ile	Val	Glu	Lys	Leu	Lys		
	50					55					60						
Glu	Met	Gln	Arg	Phe	Phe	Gly	Leu	Asn	Val	Thr	Gly	Lys	Pro	Asn	Glu		
65					70					75					80		
Glu	Thr	Leu	Asp	Met	Met	Lys	Lys	Pro	Arg	Cys	Gly	Val	Pro	Asp	Ser		
				85				90						95			

Gly	Gly	Phe	Met	Leu	Thr	Pro	Gly	Asn	Pro	Lys	Trp	Glu	Arg	Thr	Asn	
			100					105					110			
Leu	Thr	Tyr	Arg	Ile	Arg	Asn	Tyr	Thr	Pro	Gln	Leu	Ser	Glu	Ala	Glu	
		115					120					125				
Val	Glu	Arg	Ala	Ile	Lys	Asp	Ala	Phe	Glu	Leu	Trp	Ser	Val	Ala	Ser	
	130					135					140					
Pro	Leu	Ile	Phe	Thr	Arg	Ile	Ser	Gln	Gly	Glu	Ala	Asp	Ile	Asn	Ile	
145					150					155					160	
Ala	Phe	Tyr	Gln	Arg	Asp	His	Gly	Asp	Asn	Ser	Pro	Phe	Asp	Gly	Pro	
			165					170						175		
Asn	Gly	Ile	Leu	Ala	His	Ala	Phe	Gln	Pro	Gly	Gln	Gly	Ile	Gly	Gly	
		180					185						190			
Asp	Ala	His	Phe	Asp	Ala	Glu	Glu	Thr	Trp	Thr	Asn	Thr	Ser	Ala	Asn	
	195						200					205				
Tyr	Asn	Leu	Phe	Leu	Val	Ala	Ala	His	Glu	Phe	Gly	His	Ser	Leu	Gly	
	210					215					220					
Leu	Ala	His	Ser	Ser	Asp	Pro	Gly	Ala	Leu	Met	Tyr	Pro	Asn	Tyr	Ala	
225					230					235					240	
Phe	Arg	Glu	Thr	Ser	Asn	Tyr	Ser	Leu	Pro	Gln	Asp	Asp	Ile	Asp	Gly	
				245					250					255		
Ile	Gln	Ala	Ile	Tyr	Gly	Leu	Ser	Ser	Asn	Pro	Ile	Gln	Pro	Thr	Gly	
		260					265						270			
Pro	Ser	Thr	Pro	Lys	Pro	Cys	Asp	Pro	Ser	Leu	Thr	Phe	Asp	Ala	Ile	
	275						280					285				
Thr	Thr	Leu	Arg	Gly	Glu	Ile	Leu	Phe	Phe	Lys	Asp	Arg	Tyr	Phe	Trp	
	290				295						300					
Arg	Arg	His	Pro	Gln	Leu	Gln	Arg	Val	Glu	Met	Asn	Phe	Ile	Ser	Leu	
305					310					315					320	
Phe	Trp	Pro	Ser	Leu	Pro	Thr	Gly	Ile	Gln	Ala	Ala	Tyr	Glu	Asp	Phe	
			325						330					335		
Asp	Arg	Asp	Leu	Ile	Phe	Leu	Phe	Lys	Gly	Asn	Gln	Tyr	Trp	Ala	Leu	
		340						345					350			
Ser	Gly	Tyr	Asp	Ile	Leu	Gln	Gly	Tyr	Pro	Lys	Asp	Ile	Ser	Asn	Tyr	
	355						360					365				
Gly	Phe	Pro	Ser	Ser	Val	Gln	Ala	Ile	Asp	Ala	Ala	Val	Phe	Tyr	Arg	
	370					375					380					
Ser	Lys	Thr	Tyr	Phe	Phe	Val	Asn	Asp	Gln	Phe	Trp	Arg	Tyr	Asp	Asn	
385					390					395					400	
Gln	Arg	Gln	Phe	Met	Glu	Pro	Gly	Tyr	Pro	Lys	Ser	Ile	Ser	Gly	Ala	
			405						410					415		
Phe	Pro	Gly	Ile	Glu	Ser	Lys	Val	Asp	Ala	Val	Phe	Gln	Gln	Glu	His	
		420						425					430			
Phe	Phe	His	Val	Phe	Ser	Gly	Pro	Arg	Tyr	Tyr	Ala	Phe	Asp	Leu	Ile	
	435						440					445				
Ala	Gln	Arg	Val	Thr	Arg	Val	Ala	Arg	Gly	Asn	Lys	Trp	Leu	Asn	Cys	
	450					455					460					
Arg	Tyr	Gly														
465																

<210> 177
 <211> 1401
 <212> PRT
 <213> Homo sapiens

<400> 177
 Ala Thr Gly Thr Thr Cys Thr Cys Cys Cys Thr Gly Ala Ala Gly Ala

1				5					10				15			
Cys	Gly	Cys	Thr	Thr	Cys	Cys	Ala	Thr	Thr	Thr	Cys	Thr	Gly	Cys	Thr	
			20					25					30			
Cys	Thr	Thr	Ala	Cys	Thr	Cys	Cys	Ala	Thr	Gly	Thr	Gly	Cys	Ala	Gly	
		35					40					45				
Ala	Thr	Thr	Thr	Cys	Cys	Ala	Ala	Gly	Gly	Cys	Cys	Thr	Thr	Thr	Cys	
	50					55					60					
Cys	Thr	Gly	Thr	Ala	Thr	Cys	Thr	Thr	Cys	Thr	Ala	Ala	Ala	Gly	Ala	
65				70					75						80	
Gly	Ala	Ala	Ala	Ala	Ala	Thr	Ala	Cys	Ala	Ala	Ala	Ala	Ala	Cys	Thr	
				85					90					95		
Gly	Thr	Thr	Cys	Ala	Gly	Gly	Ala	Cys	Thr	Ala	Cys	Cys	Thr	Gly	Gly	
			100					105					110			
Ala	Ala	Ala	Ala	Gly	Thr	Thr	Cys	Thr	Ala	Cys	Cys	Ala	Ala	Thr	Thr	
		115					120					125				
Ala	Cys	Cys	Ala	Ala	Gly	Cys	Ala	Ala	Cys	Cys	Ala	Gly	Thr	Ala	Thr	
	130					135					140					
Cys	Ala	Gly	Thr	Cys	Thr	Ala	Cys	Ala	Ala	Gly	Gly	Ala	Ala	Gly	Ala	
145				150					155						160	
Ala	Thr	Gly	Gly	Cys	Ala	Cys	Thr	Ala	Ala	Thr	Gly	Thr	Gly	Ala	Thr	
			165					170						175		
Cys	Gly	Thr	Thr	Gly	Ala	Ala	Ala	Ala	Gly	Cys	Thr	Thr	Ala	Ala	Ala	
			180					185					190			
Gly	Ala	Ala	Ala	Thr	Gly	Cys	Ala	Gly	Cys	Gly	Ala	Thr	Thr	Thr	Thr	
	195						200					205				
Thr	Thr	Gly	Gly	Gly	Thr	Thr	Gly	Ala	Ala	Thr	Gly	Thr	Gly	Ala	Cys	
	210					215					220					
Gly	Gly	Gly	Gly	Ala	Ala	Gly	Cys	Cys	Ala	Ala	Ala	Thr	Gly	Ala	Gly	
225				230					235						240	
Gly	Ala	Ala	Ala	Cys	Thr	Cys	Thr	Gly	Gly	Ala	Cys	Ala	Thr	Gly	Ala	
			245					250						255		
Thr	Gly	Ala	Ala	Ala	Ala	Ala	Gly	Cys	Cys	Thr	Cys	Gly	Cys	Thr	Gly	
		260					265						270			
Thr	Gly	Gly	Ala	Gly	Thr	Gly	Cys	Cys	Thr	Gly	Ala	Cys	Ala	Gly	Thr	
	275						280					285				
Gly	Gly	Thr	Gly	Gly	Thr	Thr	Thr	Thr	Ala	Thr	Gly	Thr	Thr	Ala	Ala	
	290				295						300					
Cys	Cys	Cys	Cys	Ala	Gly	Gly	Ala	Ala	Ala	Cys	Cys	Cys	Cys	Ala	Ala	
305				310					315						320	
Gly	Thr	Gly	Gly	Gly	Ala	Ala	Cys	Gly	Cys	Ala	Cys	Thr	Ala	Ala	Cys	
			325					330						335		
Thr	Thr	Gly	Ala	Cys	Cys	Thr	Ala	Cys	Ala	Gly	Gly	Ala	Thr	Thr	Cys	
		340					345						350			
Gly	Ala	Ala	Ala	Cys	Thr	Ala	Thr	Ala	Cys	Cys	Cys	Cys	Ala	Cys	Ala	
	355						360					365				
Gly	Cys	Thr	Gly	Thr	Cys	Ala	Gly	Ala	Gly	Gly	Cys	Thr	Gly	Ala	Gly	
	370					375					380					
Gly	Thr	Ala	Gly	Ala	Ala	Ala	Gly	Ala	Gly	Cys	Thr	Ala	Thr	Cys	Ala	
385				390					395						400	
Ala	Gly	Gly	Ala	Thr	Gly	Cys	Cys	Thr	Thr	Thr	Gly	Ala	Ala	Cys	Thr	
			405					410						415		
Cys	Thr	Gly	Gly	Ala	Gly	Thr	Gly	Thr	Thr	Gly	Cys	Ala	Thr	Cys	Ala	
		420						425					430			
Cys	Cys	Thr	Cys	Thr	Cys	Ala	Thr	Cys	Thr	Thr	Cys	Ala	Cys	Cys	Ala	
	435					440						445				
Gly	Gly	Ala	Thr	Cys	Thr	Cys	Ala	Cys	Ala	Gly	Gly	Gly	Ala	Gly	Ala	
	450					455					460					

Gly	Gly	Cys	Ala	Gly	Ala	Thr	Ala	Thr	Cys	Ala	Ala	Cys	Ala	Thr	Thr
465					470					475					480
Gly	Cys	Thr	Thr	Thr	Thr	Thr	Ala	Cys	Cys	Ala	Ala	Ala	Gly	Ala	Gly
				485					490						495
Ala	Thr	Cys	Ala	Cys	Gly	Gly	Thr	Gly	Ala	Cys	Ala	Ala	Thr	Thr	Cys
			500					505					510		
Thr	Cys	Cys	Ala	Thr	Thr	Thr	Gly	Ala	Thr	Gly	Gly	Ala	Cys	Cys	Cys
		515					520					525			
Ala	Ala	Thr	Gly	Gly	Ala	Ala	Thr	Cys	Cys	Thr	Thr	Gly	Cys	Thr	Cys
	530					535					540				
Ala	Thr	Gly	Cys	Cys	Thr	Thr	Thr	Cys	Ala	Gly	Cys	Cys	Ala	Gly	Gly
545					550					555					560
Cys	Cys	Ala	Ala	Gly	Gly	Thr	Ala	Thr	Thr	Gly	Gly	Ala	Gly	Gly	Ala
				565					570						575
Gly	Ala	Thr	Gly	Cys	Thr	Cys	Ala	Thr	Thr	Thr	Thr	Gly	Ala	Thr	Gly
			580					585					590		
Cys	Cys	Gly	Ala	Ala	Gly	Ala	Ala	Ala	Cys	Ala	Thr	Gly	Gly	Ala	Cys
		595					600					605			
Cys	Ala	Ala	Cys	Ala	Cys	Cys	Thr	Cys	Cys	Gly	Cys	Ala	Ala	Ala	Thr
	610					615					620				
Thr	Ala	Cys	Ala	Ala	Cys	Thr	Thr	Gly	Thr	Thr	Cys	Thr	Thr	Thr	Gly
625					630						635				640
Thr	Thr	Gly	Cys	Thr	Gly	Cys	Thr	Cys	Ala	Thr	Gly	Ala	Ala	Thr	Thr
				645					650						655
Thr	Gly	Gly	Cys	Cys	Ala	Thr	Thr	Cys	Thr	Thr	Thr	Gly	Gly	Gly	Gly
			660					665					670		
Cys	Thr	Cys	Gly	Cys	Thr	Cys	Ala	Cys	Thr	Cys	Cys	Thr	Cys	Thr	Gly
		675					680					685			
Ala	Cys	Cys	Cys	Thr	Gly	Gly	Thr	Gly	Cys	Cys	Thr	Thr	Gly	Ala	Thr
	690					695					700				
Gly	Thr	Ala	Thr	Cys	Cys	Cys	Ala	Ala	Cys	Thr	Ala	Thr	Gly	Cys	Thr
705					710						715				720
Thr	Thr	Cys	Ala	Gly	Gly	Gly	Ala	Ala	Ala	Cys	Cys	Ala	Gly	Cys	Ala
				725					730						735
Ala	Cys	Thr	Ala	Cys	Thr	Cys	Ala	Cys	Thr	Cys	Cys	Cys	Thr	Cys	Ala
			740					745					750		
Ala	Gly	Ala	Thr	Gly	Ala	Cys	Ala	Thr	Cys	Gly	Ala	Thr	Gly	Gly	Cys
		755					760					765			
Ala	Thr	Thr	Cys	Ala	Gly	Gly	Cys	Cys	Ala	Thr	Cys	Thr	Ala	Thr	Gly
	770					775						780			
Gly	Ala	Cys	Thr	Thr	Thr	Cys	Ala	Ala	Gly	Cys	Ala	Ala	Cys	Cys	Cys
785					790					795					800
Thr	Ala	Thr	Cys	Cys	Ala	Ala	Cys	Cys	Thr	Ala	Cys	Thr	Gly	Gly	Ala
				805					810						815
Cys	Cys	Ala	Ala	Gly	Cys	Ala	Cys	Ala	Cys	Cys	Cys	Ala	Ala	Ala	Cys
			820					825					830		
Cys	Cys	Thr	Gly	Thr	Gly	Ala	Cys	Cys	Cys	Cys	Ala	Gly	Thr	Thr	Thr
		835						840				845			
Gly	Ala	Cys	Ala	Thr	Thr	Thr	Gly	Ala	Thr	Gly	Cys	Thr	Ala	Thr	Cys
	850					855					860				
Ala	Cys	Cys	Ala	Cys	Ala	Cys	Thr	Cys	Cys	Gly	Thr	Gly	Gly	Ala	Gly
865					870					875					880
Ala	Ala	Ala	Thr	Ala	Cys	Thr	Thr	Thr	Thr	Cys	Thr	Thr	Thr	Ala	Ala
				885					890						895
Ala	Gly	Ala	Cys	Ala	Gly	Gly	Thr	Ala	Cys	Thr	Thr	Cys	Thr	Gly	Gly
			900					905					910		
Ala	Gly	Ala	Ala	Gly	Gly	Cys	Ala	Thr	Cys	Cys	Thr	Cys	Ala	Gly	Cys

Thr Ala Ala Ala Thr Gly Gly Cys Thr Thr Ala Ala Cys Thr Gly Thr
1380 1385 1390
Ala Gly Ala Thr Ala Thr Gly Gly Cys
1395 1400

<210> 178
<211> 471
<212> PRT
<213> Homo sapiens

<400> 178
Phe Pro Leu Val Arg Met Thr Glu Asn Glu Glu Asn Met Gln Leu Ala
1 5 10 15
Gln Ala Tyr Leu Asn Gln Phe Tyr Ser Leu Glu Ile Glu Gly Asn His
20 25 30
Leu Val Gln Ser Lys Asn Arg Ser Leu Ile Asp Asp Lys Ile Arg Glu
35 40 45
Met Gln Ala Phe Phe Gly Leu Thr Val Thr Gly Lys Leu Asp Ser Asn
50 55 60
Thr Leu Glu Ile Met Lys Thr Pro Arg Cys Gly Val Pro Asp Val Gly
65 70 75 80
Gln Tyr Gly Tyr Thr Leu Pro Gly Trp Arg Lys Tyr Asn Leu Thr Tyr
85 90 95
Arg Ile Ile Asn Tyr Thr Pro Asp Met Ala Arg Ala Ala Val Asp Glu
100 105 110
Ala Ile Gln Glu Gly Leu Glu Val Trp Ser Lys Val Thr Pro Leu Lys
115 120 125
Phe Thr Lys Ile Ser Lys Gly Ile Ala Asp Ile Met Ile Ala Phe Arg
130 135 140
Thr Arg Val His Gly Arg Cys Pro Arg Tyr Phe Asp Gly Pro Leu Gly
145 150 155 160
Val Leu Gly His Ala Phe Pro Pro Gly Pro Gly Leu Gly Gly Asp Thr
165 170 175
His Phe Asp Glu Asp Glu Asn Trp Thr Lys Asp Gly Ala Gly Phe Asn
180 185 190
Leu Phe Leu Val Ala Ala His Glu Phe Gly His Ala Leu Gly Leu Ser
195 200 205
His Ser Asn Asp Gln Thr Ala Leu Met Phe Pro Asn Tyr Val Ser Leu
210 215 220
Asp Pro Arg Lys Tyr Pro Leu Ser Gln Asp Asp Ile Asn Gly Ile Gln
225 230 235 240
Ser Ile Tyr Gly Gly Leu Pro Lys Val Pro Ala Lys Pro Lys Glu Pro
245 250 255
Thr Ile Pro His Ala Cys Asp Pro Asp Leu Thr Phe Asp Ala Ile Thr
260 265 270
Thr Phe Arg Arg Glu Val Met Phe Phe Lys Gly Arg His Leu Trp Arg
275 280 285
Ile Tyr Tyr Asp Ile Thr Asp Val Glu Phe Glu Leu Ile Ala Ser Phe
290 295 300
Trp Pro Ser Leu Pro Ala Asp Leu Gln Ala Ala Tyr Glu Asn Pro Arg
305 310 315 320
Asp Lys Ile Leu Val Phe Lys Asp Glu Asn Phe Trp Met Ile Arg Gly
325 330 335
Tyr Ala Val Leu Pro Asp Tyr Pro Lys Ser Ile His Thr Leu Gly Phe
340 345 350
Pro Gly Arg Val Lys Lys Ile Asp Ala Ala Val Cys Asp Lys Thr Thr

ttgatgttcc	ccaattacat	ctccctggat	cctagcaaat	accactttc	tcaggatgat	780
attgatggga	tccagtccat	ctatggaagt	ccacctaagg	taaccaccaa	gccaagtggga	840
aattctgaac	cccacgcctg	tgacccacc	ttgacttttg	atgctatcac	tactttccgc	900
agggaagtta	tgttctttaa	aggcaggtaa	acctattccc	ttgacactcc	agcttcttat	960
aaagatgttt	ttttttttca	aaggatctcc	ggataaacag	tcttctactc	agctagaaaag	1020
ccagttgctg	agcatgtacc	agtacatcag	caagagattc	ttcctcaaga	aacaatgtag	1080
aaaacaatca	aagaaaacac	ccaagggcaa	cctgcagcct	ccacacataa	gcacacatgc	1140
attcacatgt	atgccccaca	tatgtgaaca	tgtaggcaca	catgcatgca	taccacaaac	1200
cacaaactta	agactgaaac	atgctgatgg	acacaggtac	caggacatca	ttgatgaaat	1260
atthttgtgt	taatgcaggc	acttatggag	ggctactctc	gatattgctg	gtgctgagtt	1320
tgagtttatt	gattccttct	ggccatctct	gccagctgat	cttcaagctg	cctatgaaaag	1380
ccccagagat	gagctccttg	tttttaaga	tgagaatttc	tgggtcatca	ggggatattc	1440
tgtcttgccc	ggttacccca	aatccatcca	cacactcgga	tttccaagac	gtgtgaagaa	1500
aattgatgca	gccgtctgtg	atcatgatac	aagaaaaacc	ttcttttttg	ttggcatctg	1560
gtgctggagg	tatgatgaga	tggcacaagc	aatggacaga	ggattcccac	agaggataat	1620
aaagtgcctc	ccaggaattc	gcctccgtgt	ggatgctgtc	ttccaacata	atggattcct	1680
ctatttcttc	catgggtcga	ggcaatttga	atatgacatg	aaggcgaaaa	atatcaccca	1740
agtgatcaaa	accaattctt	ggttcctgtg	taacgaacca	ttaaacgcat	cattcaatgt	1800
cagtgtcaaa	ggaaaagcaa	attcaattgg	cacagtgata	ttacatcata	aaaggttaag	1860
cttgctcact	ttcagttattg	ttcatgtgct	gacaaaaaca	tacaattaac	aataaattcc	1920
acaaataaac	caaaaacaaat	cttttaacct	gaactctgcc	tcaggaagac	tcaagagtgg	1980
gagagatgac	ccagtgggtta	agtgcactgg	ctgctctttc	aaaggaccca	ggtttgattc	2040
tcagtaccca	catggcagtc	cacagctctc	tgtaactcca	gaccagggga	aatctgatgc	2100
cctctctggc	ctctgagggc	actgcacaag	catggtgcat	agacatatac	atgcaagcaa	2160
acggctatat	atttaaaata	aaatgaaaaa	gtaaaaataat	tgagcccaat	tcttttagcat	2220
caagttctta	ctcctactat	atatcagctg	ggtaaccaat	aaccagttaa	agtatctgat	2280
tcttctaaca	gtgaagtgtt	aaatatgaca	aaaatctctc	acttattttg	agtctaatta	2340
atgatttgca	aacttggaag	attaaagcat	gtcttaaaaa	taaacattaa	agacaattct	2400
taatccaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	2460
aaaaaaa						2467

<210> 182
 <211> 1554
 <212> DNA
 <213> Mus sp.

<400> 182						
gctttaactg	aagagacagg	aatgaagtgc	cttctgtctc	tgatgggttaa	ttttataaca	60
ctttccgctg	catttcctcc	agacaggaag	gacaaaaatg	aggagaacaa	ccaactggcc	120
caggcatatc	tcaaccagtt	ctactctctt	gaaatagaag	ggagtcattt	tgtccaaagc	180
aagaacagga	gtctctttga	tggaaaactt	cgggaaatgc	aggcattttt	cggattgaca	240
gtgactggaa	aactggattc	agacacactt	gcgatcatga	aagtgccccag	gtgtggggta	300
ccagatgtgg	ggcaatatgg	ctacacactc	cctgggtgga	gaaaatacag	ccttacatac	360
agaataatga	actatactcc	tgatatgaca	ccagctgatg	tggatgaggc	tattcagaaa	420
gctctacaag	tttggagcaa	ggtcactcca	ctgacgttta	ccaggatatc	caaggggggt	480
gcagatataa	tgatagcatt	caggacagga	gtccatggct	ggtgtcctcg	tcactttgat	540
ggtcctctgg	gagtccttgg	ccatgccttt	cctcctgggc	tgggtctagg	tggtgacact	600
cactttgacg	aagatgaaac	atggatagcc	aaggatgggg	aagggttcaa	cttgtttctt	660
gtggctgtct	atgaatttgg	tcactctctg	gggtgtgtcc	actccaatga	tcaaacagcc	720
ttgatgttcc	ccaattacat	ctccctggat	cctagcaaat	accactttc	tcaggatgat	780
attgatggga	tccagtccat	ctatggaagt	ccacctaagg	taaccaccaa	gccaagtggga	840
aattctgaac	cccacgcctg	tgacccacc	ttgacttttg	atgctatcac	tactttccgc	900
agggaagtta	tgttctttaa	aggcaggcac	ttatggaggg	tctactctga	tattgctggg	960
gctgagtttg	agtttattga	ttccttctgg	ccatctctgc	cagctgatct	tcaagctgcc	1020
tatgaaagcc	ccagagatga	gctccttggt	tttaaagatg	agaatttctg	ggtcatcagg	1080
ggatattctg	tcttgcccgg	ttaccccaa	tccatccaca	cactcggatt	tccaagacgt	1140
gtgaagaaaa	ttgatgcagc	cgtctgtgat	catgatacaa	gaaaaacctt	cttttttgtt	1200

ggcatctggt gctggaggta tgatgagatg gcacaagcaa tggacagagg attcccacag 1260
aggataataa agtgcttccc aggaattcgc ctccgtgtgg atgctgtctt ccaacataat 1320
ggattcctct atttcttcca tgggtcgagg caatttgaat atgacatgaa ggcgaaaaat 1380
atcacccaag tgatcaaaac caattcttgg ttctgtgtga acgaaccatt aaacgcatca 1440
ttcaatgtca gtgtcaaagg aaaagcaa tcaattggca cagtgatatt acatcataaa 1500
aggttaagct tgctcacttt cagtattgtt catgtgtgta caaaaacata caat 1554

<210> 183
<211> 511
<212> PRT
<213> Mus sp.

<400> 183
Met Lys Cys Leu Leu Ser Leu Met Val Asn Phe Ile Thr Leu Ser Ala
1 5 10 15
Ala Phe Pro Pro Asp Arg Lys Asp Lys Asn Glu Glu Asn Asn Gln Leu
20 25 30
Ala Gln Ala Tyr Leu Asn Gln Phe Tyr Ser Leu Glu Ile Glu Gly Ser
35 40 45
His Phe Val Gln Ser Lys Asn Arg Ser Leu Phe Asp Gly Lys Leu Arg
50 55 60
Glu Met Gln Ala Phe Phe Gly Leu Thr Val Thr Gly Lys Leu Asp Ser
65 70 75 80
Asp Thr Leu Ala Ile Met Lys Val Pro Arg Cys Gly Val Pro Asp Val
85 90 95
Gly Gln Tyr Gly Tyr Thr Leu Pro Gly Trp Arg Lys Tyr Ser Leu Thr
100 105 110
Tyr Arg Ile Met Asn Tyr Thr Pro Asp Met Thr Pro Ala Asp Val Asp
115 120 125
Glu Ala Ile Gln Lys Ala Leu Gln Val Trp Ser Lys Val Thr Pro Leu
130 135 140
Thr Phe Thr Arg Ile Ser Lys Gly Val Ala Asp Ile Met Ile Ala Phe
145 150 155 160
Arg Thr Gly Val His Gly Trp Cys Pro Arg His Phe Asp Gly Pro Leu
165 170 175
Gly Val Leu Gly His Ala Phe Pro Pro Gly Leu Gly Leu Gly Gly Asp
180 185 190
Thr His Phe Asp Glu Asp Glu Thr Trp Ile Ala Lys Asp Gly Glu Gly
195 200 205
Phe Asn Leu Phe Leu Val Ala Ala His Glu Phe Gly His Ser Leu Gly
210 215 220
Leu Ser His Ser Asn Asp Gln Thr Ala Leu Met Phe Pro Asn Tyr Ile
225 230 235 240
Ser Leu Asp Pro Ser Lys Tyr Pro Leu Ser Gln Asp Asp Ile Asp Gly
245 250 255
Ile Gln Ser Ile Tyr Gly Ser Pro Pro Lys Val Thr Thr Lys Pro Ser
260 265 270
Gly Asn Ser Glu Pro His Ala Cys Asp Pro Thr Leu Thr Phe Asp Ala
275 280 285
Ile Thr Thr Phe Arg Arg Glu Val Met Phe Phe Lys Gly Arg His Leu
290 295 300
Trp Arg Val Tyr Ser Asp Ile Ala Gly Ala Glu Phe Glu Phe Ile Asp
305 310 315 320
Ser Phe Trp Pro Ser Leu Pro Ala Asp Leu Gln Ala Ala Tyr Glu Ser
325 330 335
Pro Arg Asp Glu Leu Leu Val Phe Lys Asp Glu Asn Phe Trp Val Ile
340 345 350

Arg	Gly	Tyr	Ser	Val	Leu	Pro	Gly	Tyr	Pro	Lys	Ser	Ile	His	Thr	Leu
	355						360					365			
Gly	Phe	Pro	Arg	Arg	Val	Lys	Lys	Ile	Asp	Ala	Ala	Val	Cys	Asp	His
	370					375					380				
Asp	Thr	Arg	Lys	Thr	Phe	Phe	Phe	Val	Gly	Ile	Trp	Cys	Trp	Arg	Tyr
385					390					395					400
Asp	Glu	Met	Ala	Gln	Ala	Met	Asp	Arg	Gly	Phe	Pro	Gln	Arg	Ile	Ile
			405						410					415	
Lys	Cys	Phe	Pro	Gly	Ile	Arg	Leu	Arg	Val	Asp	Ala	Val	Phe	Gln	His
			420					425					430		
Asn	Gly	Phe	Leu	Tyr	Phe	Phe	His	Gly	Ser	Arg	Gln	Phe	Glu	Tyr	Asp
	435						440					445			
Met	Lys	Ala	Lys	Asn	Ile	Thr	Gln	Val	Ile	Lys	Thr	Asn	Ser	Trp	Phe
	450					455					460				
Leu	Cys	Asn	Glu	Pro	Leu	Asn	Ala	Ser	Phe	Asn	Val	Ser	Val	Lys	Gly
465					470					475					480
Lys	Ala	Asn	Ser	Ile	Gly	Thr	Val	Ile	Leu	His	His	Lys	Arg	Leu	Ser
			485						490					495	
Leu	Leu	Thr	Phe	Ser	Ile	Val	His	Val	Leu	Thr	Lys	Thr	Tyr	Asn	
			500					505					510		

<210> 184
 <211> 17
 <212> PRT
 <213> Mus sp.

<400> 184
 Met Lys Cys Leu Leu Ser Leu Met Val Asn Phe Ile Thr Leu Ser Ala
 1 5 10 15
 Ala

<210> 185
 <211> 494
 <212> PRT
 <213> Mus sp.

<400> 185
 Phe Pro Pro Asp Arg Lys Asp Lys Asn Glu Glu Asn Asn Gln Leu Ala
 1 5 10 15
 Gln Ala Tyr Leu Asn Gln Phe Tyr Ser Leu Glu Ile Glu Gly Ser His
 20 25 30
 Phe Val Gln Ser Lys Asn Arg Ser Leu Phe Asp Gly Lys Leu Arg Glu
 35 40 45
 Met Gln Ala Phe Phe Gly Leu Thr Val Thr Gly Lys Leu Asp Ser Asp
 50 55 60
 Thr Leu Ala Ile Met Lys Val Pro Arg Cys Gly Val Pro Asp Val Gly
 65 70 75 80
 Gln Tyr Gly Tyr Thr Leu Pro Gly Trp Arg Lys Tyr Ser Leu Thr Tyr
 85 90 95
 Arg Ile Met Asn Tyr Thr Pro Asp Met Thr Pro Ala Asp Val Asp Glu
 100 105 110
 Ala Ile Gln Lys Ala Leu Gln Val Trp Ser Lys Val Thr Pro Leu Thr
 115 120 125
 Phe Thr Arg Ile Ser Lys Gly Val Ala Asp Ile Met Ile Ala Phe Arg

130	135	140
Thr Gly Val His Gly	Trp Cys Pro Arg His Phe	Asp Gly Pro Leu Gly
145	150	155
Val Leu Gly His Ala	Phe Pro Pro Gly Leu Gly	Leu Gly Gly Asp Thr
	165	170
His Phe Asp Glu Asp	Glu Thr Trp Ile Ala Lys	Asp Gly Glu Gly Phe
	180	185
Asn Leu Phe Leu Val	Ala Ala His Glu Phe Gly	His Ser Leu Gly Leu
	195	200
Ser His Ser Asn Asp	Gln Thr Ala Leu Met Phe	Pro Asn Tyr Ile Ser
	210	215
Leu Asp Pro Ser Lys	Tyr Pro Leu Ser Gln Asp	Asp Ile Asp Gly Ile
	225	230
Gln Ser Ile Tyr Gly	Ser Pro Pro Lys Val Thr	Thr Lys Pro Ser Gly
	245	250
Asn Ser Glu Pro His	Ala Cys Asp Pro Thr Leu	Thr Phe Asp Ala Ile
	260	265
Thr Thr Phe Arg Arg	Glu Val Met Phe Phe Lys	Gly Arg His Leu Trp
	275	280
Arg Val Tyr Ser Asp	Ile Ala Gly Ala Glu Phe	Glu Phe Ile Asp Ser
	290	295
Phe Trp Pro Ser Leu	Pro Ala Asp Leu Gln Ala	Ala Tyr Glu Ser Pro
	305	310
Arg Asp Glu Leu Leu	Val Phe Lys Asp Glu Asn	Phe Trp Val Ile Arg
	325	330
Gly Tyr Ser Val Leu	Pro Gly Tyr Pro Lys Ser	Ile His Thr Leu Gly
	340	345
Phe Pro Arg Arg Val	Lys Lys Ile Asp Ala Ala	Val Cys Asp His Asp
	355	360
Thr Arg Lys Thr Phe	Phe Phe Val Gly Ile Trp	Cys Trp Arg Tyr Asp
	370	375
Glu Met Ala Gln Ala	Met Asp Arg Gly Phe Pro	Gln Arg Ile Ile Lys
	385	390
Cys Phe Pro Gly Ile	Arg Leu Arg Val Asp Ala	Val Phe Gln His Asn
	405	410
Gly Phe Leu Tyr Phe	Phe His Gly Ser Arg Gln	Phe Glu Tyr Asp Met
	420	425
Lys Ala Lys Asn Ile	Thr Gln Val Ile Lys Thr	Asn Ser Trp Phe Leu
	435	440
Cys Asn Glu Pro Leu	Asn Ala Ser Phe Asn Val	Ser Val Lys Gly Lys
	450	455
Ala Asn Ser Ile Gly	Thr Val Ile Leu His His	Lys Arg Leu Ser Leu
	465	470
Leu Thr Phe Ser Ile	Val His Val Leu Thr Lys	Thr Tyr Asn
	485	490

<210> 186

<220>

<223> Unknown

<400> 186

000

<210> 187

<220>
<223> Unknown

<400> 187
000

<210> 188

<220>
<223> Unknown

<400> 188
000

<210> 189

<220>
<223> Unknown

<400> 189
000

<210> 190

<220>
<223> Unknown

<400> 190
000

<210> 191
<211> 2628
<212> DNA
<213> Homo sapiens

<400> 191
gaaaagcgct ggccggagg ggcgcggccg ggccgccggg gtgagcggtgc cgaggcggct 60
gtggcgagcagg cttccagccc ccaccatgcc gtggcccctg ctgctgctgc tggccgtgag 120
tggggccag acaaccggc catgcttccc cgggtgcaa tgcgaggtgg agaccttcgg 180
ccttttcgac agcttcagcc tgactcgggt ggattgtagc ggcctgggcc ccacatcat 240
gccggtgccc atccctctgg acacagcca cttggacctg tcctccaacc ggctggagat 300
ggtgaatgag tcggtgttgg cggggccggg ctacacgacg ttggctggcc tggatctcag 360
ccacaacctg ctcaccagca tctacccac tgccttctcc cgccttcgct acctggagtc 420
gcttgacctc agccacaatg gcctgacagc cctgccagcc gagagcttca ccagctcacc 480
cctgagcgac gtgaacctta gccacaacca gctccgggag gtctcagtgt ctgccttcac 540
gacgcacagt cagggccggg cactacacgt ggacctctcc cacaacctca ttcaccgcct 600
cgtgccccac cccacgaggg ccggcctgcc tgcgccacc attcagagcc tgaacctggc 660
ctggaaccgg ctccatgcc tgcccaacct ccgagacttg cccctgcgct acctgagcct 720
ggatgggaac cctctagctg tcattggtcc ggggtgccttc gcggggctgg gaggccttac 780
acacctgtct ctggccagcc tgcagaggct ccctgagctg gcgccagtg gcttccgtga 840
gctaccgggc ctgcaggtcc tggacctgtc gggcaacccc aagcttaact gggcaggagc 900
tgaggtgttt tcaggcctga gctccctgca ggagctggac ctttcgggca ccaacctggt 960
gccctgcct gaggcgctgc tcctccacct cccggcactg cagagcgta gcgtgggcca 1020
ggatgtgcgg tgcggcgcc tgggtcgggg gggcacctac ccccgaggc ctggctccag 1080
ccccaagggt gccctgcact gcgtagacac ccgggaatct gctgccaggg gccccacat 1140
cttgtgacaa atggtgtggc ccagggccac ataacagact gctgtcctgg gctgcctcag 1200
gtcccagata acttatgttc aatgtgccaa caccaggggg gagccccgag gcctatgtgg 1260

Thr	Arg	Pro	Cys	Phe	Pro	Gly	Cys	Gln	Cys	Glu	Val	Glu	Thr	Phe	Gly
			20					25					30		
Leu	Phe	Asp	Ser	Phe	Ser	Leu	Thr	Arg	Val	Asp	Cys	Ser	Gly	Leu	Gly
		35					40					45			
Pro	His	Ile	Met	Pro	Val	Pro	Ile	Pro	Leu	Asp	Thr	Ala	His	Leu	Asp
	50					55					60				
Leu	Ser	Ser	Asn	Arg	Leu	Glu	Met	Val	Asn	Glu	Ser	Val	Leu	Ala	Gly
65					70					75					80
Pro	Gly	Tyr	Thr	Thr	Leu	Ala	Gly	Leu	Asp	Leu	Ser	His	Asn	Leu	Leu
				85					90					95	
Thr	Ser	Ile	Ser	Pro	Thr	Ala	Phe	Ser	Arg	Leu	Arg	Tyr	Leu	Glu	Ser
			100					105					110		
Leu	Asp	Leu	Ser	His	Asn	Gly	Leu	Thr	Ala	Leu	Pro	Ala	Glu	Ser	Phe
		115					120					125			
Thr	Ser	Ser	Pro	Leu	Ser	Asp	Val	Asn	Leu	Ser	His	Asn	Gln	Leu	Arg
	130					135					140				
Glu	Val	Ser	Val	Ser	Ala	Phe	Thr	Thr	His	Ser	Gln	Gly	Arg	Ala	Leu
145					150					155					160
His	Val	Asp	Leu	Ser	His	Asn	Leu	Ile	His	Arg	Leu	Val	Pro	His	Pro
				165					170					175	
Thr	Arg	Ala	Gly	Leu	Pro	Ala	Pro	Thr	Ile	Gln	Ser	Leu	Asn	Leu	Ala
			180					185					190		
Trp	Asn	Arg	Leu	His	Ala	Val	Pro	Asn	Leu	Arg	Asp	Leu	Pro	Leu	Arg
		195					200					205			
Tyr	Leu	Ser	Leu	Asp	Gly	Asn	Pro	Leu	Ala	Val	Ile	Gly	Pro	Gly	Ala
	210					215					220				
Phe	Ala	Gly	Leu	Gly	Gly	Leu	Thr	His	Leu	Ser	Leu	Ala	Ser	Leu	Gln
225					230					235					240
Arg	Leu	Pro	Glu	Leu	Ala	Pro	Ser	Gly	Phe	Arg	Glu	Leu	Pro	Gly	Leu
				245					250					255	
Gln	Val	Leu	Asp	Leu	Ser	Gly	Asn	Pro	Lys	Leu	Asn	Trp	Ala	Gly	Ala
			260					265					270		
Glu	Val	Phe	Ser	Gly	Leu	Ser	Ser	Leu	Gln	Glu	Leu	Asp	Leu	Ser	Gly
		275					280					285			
Thr	Asn	Leu	Val	Pro	Leu	Pro	Glu	Ala	Leu	Leu	Leu	His	Leu	Pro	Ala
	290					295					300				
Leu	Gln	Ser	Val	Ser	Val	Gly	Gln	Asp	Val	Arg	Cys	Arg	Arg	Leu	Val
305					310					315					320
Arg	Glu	Gly	Thr	Tyr	Pro	Arg	Arg	Pro	Gly	Ser	Ser	Pro	Lys	Val	Ala
				325					330					335	
Leu	His	Cys	Val	Asp	Thr	Arg	Glu	Ser	Ala	Ala	Arg	Gly	Pro	Thr	Ile
			340					345					350		

Leu

<210> 194
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 194
 Met Pro Trp Pro Leu Leu Leu Leu Ala Val Ser Gly Ala Gln Thr
 1 5 10 15

<210> 195

<211> 337
 <212> PRT
 <213> Homo sapiens

<400> 195
 Thr Arg Pro Cys Phe Pro Gly Cys Gln Cys Glu Val Glu Thr Phe Gly
 1 5 10 15
 Leu Phe Asp Ser Phe Ser Leu Thr Arg Val Asp Cys Ser Gly Leu Gly
 20 25 30
 Pro His Ile Met Pro Val Pro Ile Pro Leu Asp Thr Ala His Leu Asp
 35 40 45
 Leu Ser Ser Asn Arg Leu Glu Met Val Asn Glu Ser Val Leu Ala Gly
 50 55 60
 Pro Gly Tyr Thr Thr Leu Ala Gly Leu Asp Leu Ser His Asn Leu Leu
 65 70 75 80
 Thr Ser Ile Ser Pro Thr Ala Phe Ser Arg Leu Arg Tyr Leu Glu Ser
 85 90 95
 Leu Asp Leu Ser His Asn Gly Leu Thr Ala Leu Pro Ala Glu Ser Phe
 100 105 110
 Thr Ser Ser Pro Leu Ser Asp Val Asn Leu Ser His Asn Gln Leu Arg
 115 120 125
 Glu Val Ser Val Ser Ala Phe Thr Thr His Ser Gln Gly Arg Ala Leu
 130 135 140
 His Val Asp Leu Ser His Asn Leu Ile His Arg Leu Val Pro His Pro
 145 150 155 160
 Thr Arg Ala Gly Leu Pro Ala Pro Thr Ile Gln Ser Leu Asn Leu Ala
 165 170 175
 Trp Asn Arg Leu His Ala Val Pro Asn Leu Arg Asp Leu Pro Leu Arg
 180 185 190
 Tyr Leu Ser Leu Asp Gly Asn Pro Leu Ala Val Ile Gly Pro Gly Ala
 195 200 205
 Phe Ala Gly Leu Gly Gly Leu Thr His Leu Ser Leu Ala Ser Leu Gln
 210 215 220
 Arg Leu Pro Glu Leu Ala Pro Ser Gly Phe Arg Glu Leu Pro Gly Leu
 225 230 235 240
 Gln Val Leu Asp Leu Ser Gly Asn Pro Lys Leu Asn Trp Ala Gly Ala
 245 250 255
 Glu Val Phe Ser Gly Leu Ser Ser Leu Gln Glu Leu Asp Leu Ser Gly
 260 265 270
 Thr Asn Leu Val Pro Leu Pro Glu Ala Leu Leu Leu His Leu Pro Ala
 275 280 285
 Leu Gln Ser Val Ser Val Gly Gln Asp Val Arg Cys Arg Arg Leu Val
 290 295 300
 Arg Glu Gly Thr Tyr Pro Arg Arg Pro Gly Ser Ser Pro Lys Val Ala
 305 310 315 320
 Leu His Cys Val Asp Thr Arg Glu Ser Ala Ala Arg Gly Pro Thr Ile
 325 330 335
 Leu

<210> 196
 <211> 200
 <212> PRT
 <213> Homo sapiens

<400> 196

Thr	Arg	Pro	Cys	Phe	Pro	Gly	Cys	Gln	Cys	Glu	Val	Glu	Thr	Phe	Gly
1				5					10					15	
Leu	Phe	Asp	Ser	Phe	Ser	Leu	Thr	Arg	Val	Asp	Cys	Ser	Gly	Leu	Gly
		20						25					30		
Pro	His	Ile	Met	Pro	Val	Pro	Ile	Pro	Leu	Asp	Thr	Ala	His	Leu	Asp
		35					40					45			
Leu	Ser	Ser	Asn	Arg	Leu	Glu	Met	Val	Asn	Glu	Ser	Val	Leu	Ala	Gly
	50					55					60				
Pro	Gly	Tyr	Thr	Thr	Leu	Ala	Gly	Leu	Asp	Leu	Ser	His	Asn	Leu	Leu
65					70					75					80
Thr	Ser	Ile	Ser	Pro	Thr	Ala	Phe	Ser	Arg	Leu	Arg	Tyr	Leu	Glu	Ser
			85					90						95	
Leu	Asp	Leu	Ser	His	Asn	Gly	Leu	Thr	Ala	Leu	Pro	Ala	Glu	Ser	Phe
			100					105					110		
Thr	Ser	Ser	Pro	Leu	Ser	Asp	Val	Asn	Leu	Ser	His	Asn	Gln	Leu	Arg
		115				120						125			
Glu	Val	Ser	Val	Ser	Ala	Phe	Thr	Thr	His	Ser	Gln	Gly	Arg	Ala	Leu
	130					135					140				
His	Val	Asp	Leu	Ser	His	Asn	Leu	Ile	His	Arg	Leu	Val	Pro	His	Pro
145					150					155					160
Thr	Arg	Ala	Gly	Leu	Pro	Ala	Pro	Thr	Ile	Gln	Ser	Leu	Asn	Leu	Ala
				165					170					175	
Trp	Asn	Arg	Leu	His	Ala	Val	Pro	Asn	Leu	Arg	Asp	Leu	Pro	Leu	Arg
			180					185					190		
Tyr	Leu	Ser	Leu	Asp	Gly	Asn	Pro								
		195					200								

<210> 197

<211> 23

<212> PRT

<213> Homo sapiens

<400> 197

Leu	Ala	Val	Ile	Gly	Pro	Gly	Ala	Phe	Ala	Gly	Leu	Gly	Gly	Leu	Thr
1				5					10					15	
His	Leu	Ser	Leu	Ala	Ser	Leu									
			20												

<210> 198

<211> 114

<212> PRT

<213> Homo sapiens

<400> 198

Gln	Arg	Leu	Pro	Glu	Leu	Ala	Pro	Ser	Gly	Phe	Arg	Glu	Leu	Pro	Gly
1				5					10					15	
Leu	Gln	Val	Leu	Asp	Leu	Ser	Gly	Asn	Pro	Lys	Leu	Asn	Trp	Ala	Gly
			20					25					30		
Ala	Glu	Val	Phe	Ser	Gly	Leu	Ser	Ser	Leu	Gln	Glu	Leu	Asp	Leu	Ser
		35				40						45			
Gly	Thr	Asn	Leu	Val	Pro	Leu	Pro	Glu	Ala	Leu	Leu	Leu	His	Leu	Pro
	50					55					60				
Ala	Leu	Gln	Ser	Val	Ser	Val	Gly	Gln	Asp	Val	Arg	Cys	Arg	Arg	Leu
65					70					75					80

Val	Arg	Glu	Gly	Thr	Tyr	Pro	Arg	Arg	Pro	Gly	Ser	Ser	Pro	Lys	Val
				85					90					95	
Ala	Leu	His	Cys	Val	Asp	Thr	Arg	Glu	Ser	Ala	Ala	Arg	Gly	Pro	Thr
			100					105					110		
Ile	Leu														

<210> 199

<220>

<223> Unknown

<400> 199

000

<210> 200

<220>

<223> Unknown

<400> 200

000

<210> 201

<211> 3770

<212> DNA

<213> Homo sapiens

<400> 201

gtcgacccac	gcgtccgccc	ggcctagcgc	cgcggggtcgc	gccgagccga	gccgagccga	60
gcggagccgg	cggagcctct	ggaatcaccc	gggtcgctgt	tcctgaggtg	gtcaaggtgg	120
acagggggcg	gtggtgatgg	cgagtttga	cactgaatac	cagcgccctag	aggcctccta	180
tagtgattca	ccccagggg	aggaggacct	gttgggtgcac	gtcgccgagg	ggagcaagtc	240
accttggcac	catattgaaa	accttgacct	cttcttctct	cgagtttata	atctgcacca	300
gaagaatggc	ttcacatgta	tgctcatcgg	ggagatcttt	gagctcatgc	agttcctctt	360
tgtggttgcc	ttcactacct	tcctggtcag	ctgcgtggac	tatgacatcc	tatttgccaa	420
caagatgggtg	aaccacagtc	ttcacccctac	tgaaccgcgtc	aaggctcactc	tgccagacgc	480
ctttttgcct	gctcaagtct	gtagtgccag	gattcaggaa	aatggctccc	ttatcaccat	540
cctggtcatt	gctggtgtct	tctggatcca	ccggcttatac	aagttcatct	ataacatttg	600
ctgctactgg	gagatccact	ccttctacct	gcacgctctg	cgcatcccta	tgtctgccct	660
tccgtattgc	acgtggcaag	aagtgcaggc	ccggatcggtg	cagacgcaga	aggagcacca	720
gatctgcatac	cacaaacgtg	agctgacaga	actggacatc	taccaccgca	tcctccgttt	780
ccagaactac	atggtggcac	tggttaacaa	atccctcctg	cctctgcgct	tccgcctgcc	840
tggcctcggg	gaagctgtct	tcttcacccg	tgggtctcaag	tacaactttg	agctgatcct	900
cttctgggga	cctggctctc	tgtttctcaa	tgaatggagc	ctcaaggccg	agtacaaacg	960
tgggggggcaa	cggctagagc	tggcccagcg	cctcagcaac	cgcatcctgt	ggattggcat	1020
cgctaacttc	ctgctgtgcc	ccctcctcct	catatggcaa	atcctctatg	ccttcttcag	1080
ctatgctgag	gtgctgaagc	gggagccggg	ggccctggga	gcacgctgct	ggtcactcta	1140
tggcgcgtgc	tacctccgcc	acttcaacga	gctggagcac	gagctgcagt	ccgcctcaa	1200
ccgtggctac	aagcccgctc	ccaagtacat	gaattgcttc	ttgtcacctc	ttttgacact	1260
gctggccaag	aatggagcct	tcttcgctgg	ctccatcctg	gctgtgctta	ttgccctcac	1320
catttatgac	gaagatgtgt	tggctgtgga	acatgtgctg	accaccgtca	cactcctggg	1380
ggtcaccgtg	accgtgtgca	ggtcctttat	cccggaccag	cacatgggtgt	tctgccctga	1440
gcagctgctc	cgcgtgatcc	tcgctcacat	ccactacatg	cctgaccact	ggcagggtaa	1500
tgcccaccgc	tcgcagaccc	gggacgagtt	tgcccagctc	ttccagtaca	aggcagtggt	1560
cattttggaa	gagttgctga	gccccattgt	cacacccctc	atcctcatct	tctgcctgcg	1620

cccacggggcc	ctggagatta	tagacttctt	ccgaaacttc	accgtggagg	tcgttggtgt	1680
gggagatacc	tgctcctttg	ctcagatgga	tgttcgccag	catgggtcatc	cccagtggtc	1740
atctgctggg	cagacagagg	cctcagtgtg	ccagcaagct	gaggatggaa	agacagagtt	1800
gtcactcatg	cacttttgcca	tcaccaaccc	tggtctggcag	ccaccacgtg	agagcacagc	1860
cttcctaggg	ttcctcaagg	agcaggttca	gcgggatgga	gcagctgcta	gcctcgccca	1920
agggggtctg	ctccctgaaa	atgccctctt	tacgtctatc	cagtccttac	aatctgagtc	1980
tgagcccttg	agccttatcg	caaagtgtgt	agctggctca	tcctgccggg	gccctccact	2040
gcccagagac	ctgcagggtc	ccaggcacag	ggctgaagtc	gcctctgccc	tgcgtcctt	2100
ctccccgctg	caacccgggc	aggcgccac	aggccgggct	cacagcacca	tgacaggctc	2160
tggggtggat	gccaggacag	ccagctccgg	gagcagcgtg	tgggaaggac	agctgcagag	2220
cctggtgctg	tcagaatatg	catccacaga	gatgagcctg	catgccctct	atatgcacca	2280
gctccacaag	cagcaggccc	aggctgaacc	tgagcggcat	gtatggcacc	gccgggagag	2340
tgatgagagt	ggagaaagcg	cccctgatga	agggggagag	ggcgcccggg	ccccccagtc	2400
tatccctcgc	tctgctagct	atccctgtgc	agcaccctcg	cctggagctc	ctgagaccac	2460
cgccctgcat	gggggcttcc	agaggcgcta	cggtggcatc	acagatcctg	gcacagtgcc	2520
cagggttccc	tctcatttct	ctcggctgcc	tcttgagggg	tgggcagaag	atgggcagtc	2580
ggcatcaagg	caccctgagc	ccgtgcccg	agagggtctg	gaggatgagc	tacccccctc	2640
ggtgcacaag	gtatagacaa	ggctgagcag	ggttcctgtg	gcccaggatg	gaggccaccg	2700
ctgccctgcc	atcccgtctg	cctgccatgg	gacggctcct	ctgagtgttc	cctggcccca	2760
cgtgtgtggt	gtttgtgtgt	ctgtgcctgg	ccaagggagg	tgccaacact	gggcttgcca	2820
cagccccagg	agaggaattt	ggggcctagg	aaccgagggc	acacgggact	ctagcctcat	2880
ccccaggacc	cccttggtc	agagtgtggt	gctagaaact	ggtccccagc	ccagccccag	2940
tactgccacc	tttacaccta	cccctgcaag	tccccagagg	gctgcccacg	atagaagctg	3000
ccaagcaggg	agaacctgtg	ccaactgtgg	agtggggagg	ttgggcctgg	accctcaacc	3060
cctgcaacct	tccctagccc	cctcaataga	tgagcaggtc	aggctgtggc	ccttacctca	3120
cccgagttc	tcgcccagtg	ctgcagccgg	ctcacctctc	tccgcttctt	gcacatcact	3180
ggcctgtgtg	tgctgcttgc	tcctgttctg	ttcgcttget	cccgttccgt	tcggcttttg	3240
ctttgcgtta	gggtgaagac	cctagcgtcc	agctcccctc	aacgctatat	tttgacacta	3300
aaaaagaagg	tttctaaatt	gtaggagcag	gatggaaata	ctttgtctgc	cttgccatct	3360
tttaggatgg	gccccagga	gactgaggtc	ttcctgggce	ctcattgctg	cttatcgtac	3420
ccccatcac	ctgcacatgg	gacagaccgg	gctggagggt	gacctgggtc	gtgtacgtcc	3480
cagcaaaaga	gctctggccc	gcatctcgct	gtgccctgaa	gggggatgaa	gggcgatgcc	3540
tcgcccaggg	ctttgggctg	ctgcactgca	tgctgggact	gctcctactc	tctgtcccac	3600
ccctcaccca	gctgtggtcc	ggctttggga	gagtgggtgaa	ttgcgctgcc	cgaactcgga	3660
gcggagcagg	gtagggaccg	tgtacagctt	gataaccctt	aataaaaagg	gagtttgacc	3720
agaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	gggcggccgc		3770

<210> 202
 <211> 2337
 <212> DNA
 <213> Homo sapiens

<400> 202						
tgtatgctca	tcggggagat	ctttgagctc	atgcagttcc	tctttgtggt	tgcccttact	60
accttcctgg	tcagctgcgt	ggactatgac	atcctatctg	ccaacaagat	ggtgaaccac	120
agtcttcacc	ctactgaacc	cgtcaaggctc	actctgccag	acgccttttt	gcctgctcaa	180
gtctgtagtg	ccaggattca	ggaaaatggc	tcccttatca	ccatcctggg	cattgctggg	240
gtcttctgga	tccaccggct	tatcaagttc	atctataaca	tttgctgcta	ctgggagatc	300
cactccttct	acctgcacgc	tctgcgcatac	cctatgtctg	cccttccgta	ttgcacgtgg	360
caagaagtgc	aggccccgat	cgtgcagacg	cagaaggagc	accagatctg	catccacaaa	420
cgtgagctga	cagaactgga	catctaccac	cgcatectcc	gtttccagaa	ctacatggtg	480
gcactgggtta	acaaatccct	cctgcctctg	cgcttccgcc	tgcttggcct	cggggaagct	540
gtcttcttca	cccgtgggtc	caagtacaac	tttgagctga	tcctcttctg	gggacctggc	600
tctctgtttc	tcaatgaatg	gagcctcaag	gccgagtaca	aacgtggggg	gcaacggcta	660
gagctggccc	agcgcctcag	caaccgcatac	ctgtggattg	gcatacgctaa	cttccctgctg	720
tgccccctca	tcctcatatg	gcaaatccctc	tatgccttct	tcagctatgc	tgagggtgctg	780
aagcggggagc	cggggggcct	gggagcacgc	tgctgggtcac	tctatggccg	ctgctacctc	840

```

cgccacttca acgagctgga gcacgagctg cagtcccgcg tcaaccgtgg ctacaagccc 900
gcctccaagt acatgaattg cttcttgtca cctcttttga cactgctggc caagaatgga 960
gccttcttcg ctggctccat cctggctgtg cttattgccc tcaccattta tgacgaagat 1020
gtgttggtcg tggaacatgt gctgaccacc gtcacactcc tgggggtcac cgtgaccgtg 1080
tgcaggctct ttatcccgga ccagcacatg gtgttctgcc ctgagcagct gctccgcgtg 1140
atcctcgctc acatccacta catgcctgac cactggcagg gtaatgcccc ccgctcgag 1200
accgggagc agtttgcccc gctcttccag tacaaggcag tgttcatttt ggaagagttg 1260
ctgagcccc a ttgtcacacc cctcatcctc atcttctgcc tgcgcccacg ggccctggag 1320
attatagact tcttccgaaa cttcaccgtg gaggtcgttg gtgtgggaga tacctgctcc 1380
tttgctcaga tggatgttcg ccagcatggg catccccagt ggctatctgc tgggcagaca 1440
gaggcctcag tgtaccagca agctgaggat ggaaagacag agttgtcact catgcacttt 1500
gccatcacca accctggctg gcagccacca cgtgagagca cagccttctc aggcttctc 1560
aaggagcagg ttcagcggga tggagcagct gtagcctcg cccaaggggg tctgctccct 1620
gaaaatgccc tctttacgtc tatccagtc ttacaatctg agtctgagcc cctgagcctt 1680
atcgcaaatg tggtagctgg ctcatcctgc cggggccctc cactgcccag agacctgcag 1740
ggctccaggc acagggctga agtcgcctct gccctgcgct ccttctcccc gctgcaacct 1800
gggcaggcgc ccacaggccg ggctcacagc accatgacag gctctggggg ggatgccagg 1860
acagccagct ccgggagcag cgtgtgggaa ggacagctgc agagcctggg gctgtcagaa 1920
tatgcatcca cagagatgag cctgcatgcc ctctatatgc accagctcca caagcagcag 1980
gcccaggctg aacctgagcg gcatgtatgg caccgccggg agagtgatga gagtggagaa 2040
agcgccccct atgaaggggg agagggcgcc cgggcccccc agtctatccc tcgctctgct 2100
agctatccct gtgcagcacc ccggcctgga gctcctgaga ccaccgccct gcatgggggc 2160
ttccagaggc gctacggtg catcacagat cctggcacag tgcccagggt tccctctcat 2220
ttctctcggc tgccctcttg aggggtgggca gaagatgggc agtcggcatc aaggcacct 2280
gagcccgtgc ccgaagaggg ctcggaggat gagctacccc ctcagggtgca caaggta 2337

```

<210> 203
 <211> 778
 <212> PRT
 <213> Homo sapiens

```

<400> 203
Met Leu Ile Gly Glu Ile Phe Glu Leu Met Gln Phe Leu Phe Val Val
 1           5           10           15
Ala Phe Thr Thr Phe Leu Val Ser Cys Val Asp Tyr Asp Ile Leu Phe
 20           25           30
Ala Asn Lys Met Val Asn His Ser Leu His Pro Thr Glu Pro Val Lys
 35           40           45
Val Thr Leu Pro Asp Ala Phe Leu Pro Ala Gln Val Cys Ser Ala Arg
 50           55           60
Ile Gln Glu Asn Gly Ser Leu Ile Thr Ile Leu Val Ile Ala Gly Val
 65           70           75           80
Phe Trp Ile His Arg Leu Ile Lys Phe Ile Tyr Asn Ile Cys Cys Tyr
 85           90           95
Trp Glu Ile His Ser Phe Tyr Leu His Ala Leu Arg Ile Pro Met Ser
 100          105          110
Ala Leu Pro Tyr Cys Thr Trp Gln Glu Val Gln Ala Arg Ile Val Gln
 115          120          125
Thr Gln Lys Glu His Gln Ile Cys Ile His Lys Arg Glu Leu Thr Glu
 130          135          140
Leu Asp Ile Tyr His Arg Ile Leu Arg Phe Gln Asn Tyr Met Val Ala
 145          150          155          160
Leu Val Asn Lys Ser Leu Leu Pro Leu Arg Phe Arg Leu Pro Gly Leu
 165          170          175
Gly Glu Ala Val Phe Phe Thr Arg Gly Leu Lys Tyr Asn Phe Glu Leu
 180          185          190
Ile Leu Phe Trp Gly Pro Gly Ser Leu Phe Leu Asn Glu Trp Ser Leu

```


				645				650					655				
Lys	Gln	Gln	Ala	Gln	Ala	Glu	Pro	Glu	Arg	His	Val	Trp	His	Arg	Arg		
			660					665					670				
Glu	Ser	Asp	Glu	Ser	Gly	Glu	Ser	Ala	Pro	Asp	Glu	Gly	Gly	Glu	Gly		
		675					680					685					
Ala	Arg	Ala	Pro	Gln	Ser	Ile	Pro	Arg	Ser	Ala	Ser	Tyr	Pro	Cys	Ala		
	690					695					700						
Ala	Pro	Arg	Pro	Gly	Ala	Pro	Glu	Thr	Thr	Ala	Leu	His	Gly	Gly	Phe		
705				710						715					720		
Gln	Arg	Arg	Tyr	Gly	Gly	Ile	Thr	Asp	Pro	Gly	Thr	Val	Pro	Arg	Val		
			725					730						735			
Pro	Ser	His	Phe	Ser	Arg	Leu	Pro	Leu	Gly	Gly	Trp	Ala	Glu	Asp	Gly		
			740					745					750				
Gln	Ser	Ala	Ser	Arg	His	Pro	Glu	Pro	Val	Pro	Glu	Glu	Gly	Ser	Glu		
		755					760					765					
Asp	Glu	Leu	Pro	Pro	Gln	Val	His	Lys	Val								
	770					775											

<210> 204
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 204
 Met Leu Ile Gly Glu Ile Phe Glu Leu Met Gln Phe Leu Phe Val Val
 1 5 10 15
 Ala Phe Thr Thr Phe Leu Val Ser Cys
 20 25

<210> 205
 <211> 753
 <212> PRT
 <213> Homo sapiens

<400> 205
 Val Asp Tyr Asp Ile Leu Phe Ala Asn Lys Met Val Asn His Ser Leu
 1 5 10 15
 His Pro Thr Glu Pro Val Lys Val Thr Leu Pro Asp Ala Phe Leu Pro
 20 25 30
 Ala Gln Val Cys Ser Ala Arg Ile Gln Glu Asn Gly Ser Leu Ile Thr
 35 40 45
 Ile Leu Val Ile Ala Gly Val Phe Trp Ile His Arg Leu Ile Lys Phe
 50 55 60
 Ile Tyr Asn Ile Cys Cys Tyr Trp Glu Ile His Ser Phe Tyr Leu His
 65 70 75 80
 Ala Leu Arg Ile Pro Met Ser Ala Leu Pro Tyr Cys Thr Trp Gln Glu
 85 90 95
 Val Gln Ala Arg Ile Val Gln Thr Gln Lys Glu His Gln Ile Cys Ile
 100 105 110
 His Lys Arg Glu Leu Thr Glu Leu Asp Ile Tyr His Arg Ile Leu Arg
 115 120 125
 Phe Gln Asn Tyr Met Val Ala Leu Val Asn Lys Ser Leu Leu Pro Leu
 130 135 140

Arg	Phe	Arg	Leu	Pro	Gly	Leu	Gly	Glu	Ala	Val	Phe	Phe	Thr	Arg	Gly
145					150					155					160
Leu	Lys	Tyr	Asn	Phe	Glu	Leu	Ile	Leu	Phe	Trp	Gly	Pro	Gly	Ser	Leu
				165						170					175
Phe	Leu	Asn	Glu	Trp	Ser	Leu	Lys	Ala	Glu	Tyr	Lys	Arg	Gly	Gly	Gln
			180						185					190	
Arg	Leu	Glu	Leu	Ala	Gln	Arg	Leu	Ser	Asn	Arg	Ile	Leu	Trp	Ile	Gly
		195					200					205			
Ile	Ala	Asn	Phe	Leu	Leu	Cys	Pro	Leu	Ile	Leu	Ile	Trp	Gln	Ile	Leu
	210					215					220				
Tyr	Ala	Phe	Phe	Ser	Tyr	Ala	Glu	Val	Leu	Lys	Arg	Glu	Pro	Gly	Ala
225					230					235					240
Leu	Gly	Ala	Arg	Cys	Trp	Ser	Leu	Tyr	Gly	Arg	Cys	Tyr	Leu	Arg	His
				245						250					255
Phe	Asn	Glu	Leu	Glu	His	Glu	Leu	Gln	Ser	Arg	Leu	Asn	Arg	Gly	Tyr
			260					265						270	
Lys	Pro	Ala	Ser	Lys	Tyr	Met	Asn	Cys	Phe	Leu	Ser	Pro	Leu	Leu	Thr
		275					280						285		
Leu	Leu	Ala	Lys	Asn	Gly	Ala	Phe	Phe	Ala	Gly	Ser	Ile	Leu	Ala	Val
	290					295					300				
Leu	Ile	Ala	Leu	Thr	Ile	Tyr	Asp	Glu	Asp	Val	Leu	Ala	Val	Glu	His
305					310						315				320
Val	Leu	Thr	Thr	Val	Thr	Leu	Leu	Gly	Val	Thr	Val	Thr	Val	Cys	Arg
				325					330					335	
Ser	Phe	Ile	Pro	Asp	Gln	His	Met	Val	Phe	Cys	Pro	Glu	Gln	Leu	Leu
			340					345						350	
Arg	Val	Ile	Leu	Ala	His	Ile	His	Tyr	Met	Pro	Asp	His	Trp	Gln	Gly
		355					360						365		
Asn	Ala	His	Arg	Ser	Gln	Thr	Arg	Asp	Glu	Phe	Ala	Gln	Leu	Phe	Gln
	370					375					380				
Tyr	Lys	Ala	Val	Phe	Ile	Leu	Glu	Glu	Leu	Leu	Ser	Pro	Ile	Val	Thr
385					390					395					400
Pro	Leu	Ile	Leu	Ile	Phe	Cys	Leu	Arg	Pro	Arg	Ala	Leu	Glu	Ile	Ile
				405					410					415	
Asp	Phe	Phe	Arg	Asn	Phe	Thr	Val	Glu	Val	Val	Gly	Val	Gly	Asp	Thr
				420					425					430	
Cys	Ser	Phe	Ala	Gln	Met	Asp	Val	Arg	Gln	His	Gly	His	Pro	Gln	Trp
		435					440					445			
Leu	Ser	Ala	Gly	Gln	Thr	Glu	Ala	Ser	Val	Tyr	Gln	Gln	Ala	Glu	Asp
	450					455					460				
Gly	Lys	Thr	Glu	Leu	Ser	Leu	Met	His	Phe	Ala	Ile	Thr	Asn	Pro	Gly
465					470					475					480
Trp	Gln	Pro	Pro	Arg	Glu	Ser	Thr	Ala	Phe	Leu	Gly	Phe	Leu	Lys	Glu
				485					490					495	
Gln	Val	Gln	Arg	Asp	Gly	Ala	Ala	Ala	Ser	Leu	Ala	Gln	Gly	Gly	Leu
			500					505					510		
Leu	Pro	Glu	Asn	Ala	Leu	Phe	Thr	Ser	Ile	Gln	Ser	Leu	Gln	Ser	Glu
		515					520						525		
Ser	Glu	Pro	Leu	Ser	Leu	Ile	Ala	Asn	Val	Val	Ala	Gly	Ser	Ser	Cys
	530					535					540				
Arg	Gly	Pro	Pro	Leu	Pro	Arg	Asp	Leu	Gln	Gly	Ser	Arg	His	Arg	Ala
545					550					555					560
Glu	Val	Ala	Ser	Ala	Leu	Arg	Ser	Phe	Ser	Pro	Leu	Gln	Pro	Gly	Gln
				565					570					575	
Ala	Pro	Thr	Gly	Arg	Ala	His	Ser	Thr	Met	Thr	Gly	Ser	Gly	Val	Asp
			580					585					590		

Ala Arg Thr Ala Ser Ser Gly Ser Ser Val Trp Glu Gly Gln Leu Gln
 595 600 605
 Ser Leu Val Leu Ser Glu Tyr Ala Ser Thr Glu Met Ser Leu His Ala
 610 615 620
 Leu Tyr Met His Gln Leu His Lys Gln Gln Ala Gln Ala Glu Pro Glu
 625 630 635 640
 Arg His Val Trp His Arg Arg Glu Ser Asp Glu Ser Gly Glu Ser Ala
 645 650 655
 Pro Asp Glu Gly Gly Glu Gly Ala Arg Ala Pro Gln Ser Ile Pro Arg
 660 665 670
 Ser Ala Ser Tyr Pro Cys Ala Ala Pro Arg Pro Gly Ala Pro Glu Thr
 675 680 685
 Thr Ala Leu His Gly Gly Phe Gln Arg Arg Tyr Gly Gly Ile Thr Asp
 690 695 700
 Pro Gly Thr Val Pro Arg Val Pro Ser His Phe Ser Arg Leu Pro Leu
 705 710 715 720
 Gly Gly Trp Ala Glu Asp Gly Gln Ser Ala Ser Arg His Pro Glu Pro
 725 730 735
 Val Pro Glu Glu Gly Ser Glu Asp Glu Leu Pro Pro Gln Val His Lys
 740 745 750
 Val

<210> 206
 <211> 45
 <212> PRT
 <213> Homo sapiens

<400> 206
 Val Asp Tyr Asp Ile Leu Phe Ala Asn Lys Met Val Asn His Ser Leu
 1 5 10 15
 His Pro Thr Glu Pro Val Lys Val Thr Leu Pro Asp Ala Phe Leu Pro
 20 25 30
 Ala Gln Val Cys Ser Ala Arg Ile Gln Glu Asn Gly Ser
 35 40 45

<210> 207
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 207
 Leu Ile Thr Ile Leu Val Ile Ala Gly Val Phe Trp Ile His Arg Leu
 1 5 10 15
 Ile

<210> 208
 <211> 141
 <212> PRT
 <213> Homo sapiens

<400> 208
 Lys Phe Ile Tyr Asn Ile Cys Cys Tyr Trp Glu Ile His Ser Phe Tyr

1				5					10					15		
Leu	His	Ala	Leu	Arg	Ile	Pro	Met	Ser	Ala	Leu	Pro	Tyr	Cys	Thr	Trp	
			20					25					30			
Gln	Glu	Val	Gln	Ala	Arg	Ile	Val	Gln	Thr	Gln	Lys	Glu	His	Gln	Ile	
		35					40					45				
Cys	Ile	His	Lys	Arg	Glu	Leu	Thr	Glu	Leu	Asp	Ile	Tyr	His	Arg	Ile	
	50					55					60					
Leu	Arg	Phe	Gln	Asn	Tyr	Met	Val	Ala	Leu	Val	Asn	Lys	Ser	Leu	Leu	
65					70					75					80	
Pro	Leu	Arg	Phe	Arg	Leu	Pro	Gly	Leu	Gly	Glu	Ala	Val	Phe	Phe	Thr	
			85					90						95		
Arg	Gly	Leu	Lys	Tyr	Asn	Phe	Glu	Leu	Ile	Leu	Phe	Trp	Gly	Pro	Gly	
		100					105						110			
Ser	Leu	Phe	Leu	Asn	Glu	Trp	Ser	Leu	Lys	Ala	Glu	Tyr	Lys	Arg	Gly	
	115					120					125					
Gly	Gln	Arg	Leu	Glu	Leu	Ala	Gln	Arg	Leu	Ser	Asn	Arg				
	130					135					140					

<210> 209
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 209
 Ile Leu Trp Ile Gly Ile Ala Asn Phe Leu Leu Cys Pro Leu Ile Leu
 1 5 10 15
 Ile Trp Gln Ile Leu Tyr Ala Phe Phe
 20 25

<210> 210
 <211> 66
 <212> PRT
 <213> Homo sapiens

<400> 210
 Ser Tyr Ala Glu Val Leu Lys Arg Glu Pro Gly Ala Leu Gly Ala Arg
 1 5 10 15
 Cys Trp Ser Leu Tyr Gly Arg Cys Tyr Leu Arg His Phe Asn Glu Leu
 20 25 30
 Glu His Glu Leu Gln Ser Arg Leu Asn Arg Gly Tyr Lys Pro Ala Ser
 35 40 45
 Lys Tyr Met Asn Cys Phe Leu Ser Pro Leu Leu Thr Leu Leu Ala Lys
 50 55 60
 Asn Gly
 65

<210> 211
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 211
 Ala Phe Phe Ala Gly Ser Ile Leu Ala Val Leu Ile Ala Leu Thr Ile
 1 5 10 15

Tyr

<210> 212
<211> 9
<212> PRT
<213> Homo sapiens

<400> 212
Asp Glu Asp Val Leu Ala Val Glu His
1 5

<210> 213
<211> 19
<212> PRT
<213> Homo sapiens

<400> 213
Val Leu Thr Thr Val Thr Leu Leu Gly Val Thr Val Thr Val Cys Arg
1 5 10 15
Ser Phe Ile

<210> 214
<211> 414
<212> PRT
<213> Homo sapiens

<400> 214
Pro Asp Gln His Met Val Phe Cys Pro Glu Gln Leu Leu Arg Val Ile
1 5 10 15
Leu Ala His Ile His Tyr Met Pro Asp His Trp Gln Gly Asn Ala His
20 25 30
Arg Ser Gln Thr Arg Asp Glu Phe Ala Gln Leu Phe Gln Tyr Lys Ala
35 40 45
Val Phe Ile Leu Glu Glu Leu Leu Ser Pro Ile Val Thr Pro Leu Ile
50 55 60
Leu Ile Phe Cys Leu Arg Pro Arg Ala Leu Glu Ile Ile Asp Phe Phe
65 70 75 80
Arg Asn Phe Thr Val Glu Val Val Gly Val Gly Asp Thr Cys Ser Phe
85 90 95
Ala Gln Met Asp Val Arg Gln His Gly His Pro Gln Trp Leu Ser Ala
100 105 110
Gly Gln Thr Glu Ala Ser Val Tyr Gln Gln Ala Glu Asp Gly Lys Thr
115 120 125
Glu Leu Ser Leu Met His Phe Ala Ile Thr Asn Pro Gly Trp Gln Pro
130 135 140
Pro Arg Glu Ser Thr Ala Phe Leu Gly Phe Leu Lys Glu Gln Val Gln
145 150 155 160
Arg Asp Gly Ala Ala Ala Ser Leu Ala Gln Gly Gly Leu Leu Pro Glu
165 170 175
Asn Ala Leu Phe Thr Ser Ile Gln Ser Leu Gln Ser Glu Ser Glu Pro
180 185 190
Leu Ser Leu Ile Ala Asn Val Val Ala Gly Ser Ser Cys Arg Gly Pro


```

atcctcgctc acatccacta catgcctgac cactggcagg gtaatgcca ccgctcgag 1380
acccgggacg agtttgcca gctcttcag tacaaggcag tgttcathtt ggaagagttg 1440
ctgagcccca ttgtcacacc cctcatcctc atcttctgcc tgcgcccacg ggccctggag 1500
attatagact tcttccgaaa cttcacctg gaggtcggtg gtgtgggaga tacctgctcc 1560
tttgctcaga tggatgttcg ccagcatggt catccccagt ggctatctgc tgggcagaca 1620
gaggcctcag tgtaccagca agctgaggat ggaaagacag agttgtcact catgcacttt 1680
gccatcacca accctggctg gcagccacca cgtgagagca cagccttcct aggcttcctc 1740
aaggagcagg ttcagcgga tggagcagct gctagcctcg cccaaggggg tctgctccct 1800
gaaaatgcc tctttacgtc tatccagtcc ttacaatctg agtctgagcc cctgagcctt 1860
atcgcaaagt tggtagctgg ctcatectgc cggggccctc cactgcccag agacctgcag 1920
ggctccaggc gggtcacag caccatgaca ggctctgggg tggatgccag gacagccagc 1980
tccgggagca gcgtgtgga aggacagctg cagagcctgg tgctgtcaga atatgcatcc 2040
acagagatga gcctgcatgc cctctatatg caccagctcc acaagcagca ggcccaggct 2100
gaacctgagc ggcattgtat gcaccgccgg gagagtgatg agagtggaga aagcgccct 2160
gatgaagggg gagagggcgc cggggccccc cagtctatcc ctcgctctgc tagctatccc 2220
tgtgcagcac cccggcctgg agctcctgag accaccgcc tgcattgggg cttccagagg 2280
cgctacggtg gcatcacaga tcctggcaca gtgcccaggg ttccctctca tttctctcgg 2340
ctgcctcttg gaggggtggg agaagatggg cagtcggcat caaggcacc tgagcccgtg 2400
cccgaagagg gctcggagga tgagctaccc cctcaggtgc acaaggta 2448

```

<210> 216
 <211> 816
 <212> PRT
 <213> Homo sapiens

<400> 216

Met	Ala	Gln	Phe	Asp	Thr	Glu	Tyr	Gln	Arg	Leu	Glu	Ala	Ser	Tyr	Ser
1				5					10					15	
Asp	Ser	Pro	Pro	Gly	Glu	Glu	Asp	Leu	Leu	Val	His	Val	Ala	Glu	Gly
		20						25					30		
Ser	Lys	Ser	Pro	Trp	His	His	Ile	Glu	Asn	Leu	Asp	Leu	Phe	Phe	Ser
		35					40					45			
Arg	Val	Tyr	Asn	Leu	His	Gln	Lys	Asn	Gly	Phe	Thr	Cys	Met	Leu	Ile
	50					55					60				
Gly	Glu	Ile	Phe	Glu	Leu	Met	Gln	Phe	Leu	Phe	Val	Val	Ala	Phe	Thr
65						70				75					80
Thr	Phe	Leu	Val	Ser	Cys	Val	Asp	Tyr	Asp	Ile	Leu	Phe	Ala	Asn	Lys
				85					90					95	
Met	Val	Asn	His	Ser	Leu	His	Pro	Thr	Glu	Pro	Val	Lys	Val	Thr	Leu
			100					105					110		
Pro	Asp	Ala	Phe	Leu	Pro	Ala	Gln	Val	Cys	Ser	Ala	Arg	Ile	Gln	Glu
		115					120					125			
Asn	Gly	Ser	Leu	Ile	Thr	Ile	Leu	Val	Ile	Ala	Gly	Val	Phe	Trp	Ile
	130					135					140				
His	Arg	Leu	Ile	Lys	Phe	Ile	Tyr	Asn	Ile	Cys	Cys	Tyr	Trp	Glu	Ile
145					150					155					160
His	Ser	Phe	Tyr	Leu	His	Ala	Leu	Arg	Ile	Pro	Met	Ser	Ala	Leu	Pro
				165					170					175	
Tyr	Cys	Thr	Trp	Gln	Glu	Val	Gln	Ala	Arg	Ile	Val	Gln	Thr	Gln	Lys
			180					185					190		
Glu	His	Gln	Ile	Cys	Ile	His	Lys	Arg	Glu	Leu	Thr	Glu	Leu	Asp	Ile
		195					200					205			
Tyr	His	Arg	Ile	Leu	Arg	Phe	Gln	Asn	Tyr	Met	Val	Ala	Leu	Val	Asn
	210					215					220				
Lys	Ser	Leu	Leu	Pro	Leu	Arg	Phe	Arg	Leu	Pro	Gly	Leu	Gly	Glu	Ala
225					230					235					240
Val	Phe	Phe	Thr	Arg	Gly	Leu	Lys	Tyr	Asn	Phe	Glu	Leu	Ile	Leu	Phe

690						695						700					
His	Val	Trp	His	Arg	Arg	Glu	Ser	Asp	Glu	Ser	Gly	Glu	Ser	Ala	Pro		
705						710					715				720		
Asp	Glu	Gly	Gly	Glu	Gly	Ala	Arg	Ala	Pro	Gln	Ser	Ile	Pro	Arg	Ser		
					725					730					735		
Ala	Ser	Tyr	Pro	Cys	Ala	Ala	Pro	Arg	Pro	Gly	Ala	Pro	Glu	Thr	Thr		
			740					745				750					
Ala	Leu	His	Gly	Gly	Phe	Gln	Arg	Arg	Tyr	Gly	Gly	Ile	Thr	Asp	Pro		
		755					760					765					
Gly	Thr	Val	Pro	Arg	Val	Pro	Ser	His	Phe	Ser	Arg	Leu	Pro	Leu	Gly		
	770					775					780						
Gly	Trp	Ala	Glu	Asp	Gly	Gln	Ser	Ala	Ser	Arg	His	Pro	Glu	Pro	Val		
785					790					795					800		
Pro	Glu	Glu	Gly	Ser	Glu	Asp	Glu	Leu	Pro	Pro	Gln	Val	His	Lys	Val		
				805					810						815		

<210> 217

<220>

<223> Unknown

<400> 217

000

<210> 218

<220>

<223> Unknown

<400> 218

000

<210> 219

<220>

<223> Unknown

<400> 219

000

<210> 220

<220>

<223> Unknown

<400> 220

000

<210> 221

<211> 2989

<212> DNA

<213> Homo sapiens

<400> 221

gctgggagcg gaggcgcagg caatgctcag ccctggatgt agctgagagg ctgggagaag 60
agacgaccgc tggagaccga gcggcgtggg gaagacctag gggggtgggt gggggaagca 120

gacaggagaa	cactcgaaat	caagcgcttt	acagattatt	ttattttgta	tagagaacac	180
gtagcgactc	cgaagatcag	ccccaatgaa	catgtcagtg	ttgactttac	aagaatatga	240
attcgaaaag	cagttcaacg	agaatgaagc	catccaatgg	atgcaggaaa	actggaagaa	300
atctttcttg	ttttctgctc	tgtatgctgc	ctttatatcc	gggtggtcggc	acctaataaa	360
taaacgagca	aagtttgaac	tgaggaagcc	attagtgtgc	tgggtctctga	cccttgagtg	420
cttcagtata	ttcgggtgctc	ttcgaactgg	tgcttatatg	gtgtacattt	tgatgaccaa	480
aggcctgaag	cagtcagttt	gtgaccaggg	tttttacaat	ggacctgtca	gcaaattctg	540
ggcttatgca	tttgtgctaa	gcaaagcacc	cgaactagga	gatacaatat	tcattattct	600
gaggaagcag	aagctgatct	tcctgcaactg	gtatcaccac	atcactgtgc	tcctgtactc	660
ttggtactcc	tacaaagaca	tggttgccgg	gggaggttgg	ttcatgacta	tgaactatgg	720
cgtgcacgcc	gtgatgtact	cttactatgc	cttgccggcg	gcaggtttcc	gagtcctccc	780
gaagtttgcc	atgttcatca	ccttgctcca	gatcactcag	atgctgatgg	gctgtgtggg	840
taactacctg	gtcttctgct	ggatgcagca	tgaccagtgt	cactctcact	ttcagaacat	900
cttctgggtc	tcactcatgt	acctcagcta	ccttggtgctc	ttctgccatt	tcttctttga	960
ggcctacatc	ggcaaaatga	ggaaaacaac	gaaagctgaa	tagtggttga	actgaggagg	1020
aagccatagc	tcagggtcat	caagaaaaat	aatagacaaa	agaaaatggc	acaaggaatc	1080
acacgtggtg	cagctaaaac	aaaacaaaac	atgagcaaac	acaaaaccca	aggcagctta	1140
gggataatta	ggttgattta	acccagtaag	tttatgatcc	ttttagggtg	aggactcact	1200
gagtgacact	ccatctccaa	gcactgctgc	tggaagaccc	cattccctct	ttatctatca	1260
actctaggac	aaggggagaac	aaaagcaagc	cagaagcaga	ggagactaat	caaaggcaaa	1320
caaaggctat	taacacatag	gaaaaaatgt	atttactaag	tgtcacattt	ctctaagatg	1380
aaagattttt	actctagaaa	ctgtgcgagc	acaacacaca	caatcctttc	taactttatg	1440
gacactaaac	tggagccaat	agaaaagaca	aaaatgaaag	agacacaggg	tgtatatcta	1500
gaacgataat	gctttttgcag	aaactaaagc	cttttttaaga	aatgccagct	gctgtagacc	1560
ccatgagaaa	agatgtctta	atcatcctta	tgaaaacaga	tgtaaacac	tatatattca	1620
ctaacttcat	cttactgca	tagcctcagg	ctagttagtt	tgccaaaacc	aaaggggggtg	1680
aatacttccc	caagattctt	cctggggagga	tggaacacag	gcagcccagg	tcccatgggg	1740
gcagctccat	cccagagcat	ttctgatagt	tgaactgtaa	tttctactct	taagttagat	1800
atgaagcatt	atccttttgt	tcagttgccc	cgggcttttg	aacagaagag	taaatacaga	1860
attgaaaaag	ataaacactc	aaccaaaacaa	tgtgaaaacg	ggttctgtag	tatttgtaaa	1920
aaggcccgcc	ccaggaccac	tgtgagctgg	aaaagggaga	aaggcagtg	gaaaagaggt	1980
gagccgaaga	tcaattcgac	agacagacgg	tgtgtatgcc	cctccctggt	tgacttcaca	2040
cacactcata	actttccaaa	tgaaccccca	cagtatagcg	catattttcg	atatttttgt	2100
gaattccaaa	aggaaatcac	agggtgttgc	gaaatatttg	gggaacactg	tgtttctgca	2160
tcactctgat	ttgtcccca	agcaatgtag	aggtgtttta	agggccctct	gctggctgag	2220
tggcaatact	acaacaaact	tcaaggcaag	tttggctgaa	aacagttgac	aacaaagggc	2280

ccccatacac	ttatccctca	aatttttaagt	gatatgaaat	acttgtcatg	tctttggcca	2340
aatcagaaga	tattcatcct	gcttcaagtc	agcttcagaa	atgtttttaa	agggacttta	2400
gctctggaac	tcaaaatcaa	tttattaaga	gccatattct	ttaaaaaaa	aaagctggat	2460
aatatttctt	gtaatatatt	agtcctttac	aagccaaata	catgtgtcaa	tgtttctagt	2520
atttcaaaga	agcaattatg	taaagttgtt	caatgtgaca	taatagtatt	ataattgggt	2580
aagtagctta	atgattaggg	aaactagatg	aaaagattag	gggcttccac	actgcataga	2640
ttacacgcac	atagccacgc	atacacacac	agacacacag	atgtggggta	cactgaactt	2700
caaagcccaa	atgaatagaa	acacattttc	tggttagcag	aaaaaaacaa	aacaaaactg	2760
ttgtttctct	ttcttgcttt	gagagtgtac	agtaaaaggg	attttttcga	attattttta	2820
tattatttta	gctttaattg	tgctgtcggt	catgaaacag	agctgtctct	cttttctgtc	2880
agagatggca	agggtttttt	cagcatctcg	tttatgtgtg	gaatttaaaa	agaataaagt	2940
tttattccat	tctgtgtgaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa		2989

<210> 222
 <211> 795
 <212> DNA
 <213> Homo sapiens

<400> 222
 atgaacatgt cagtgttgac tttaacaagaa tatgaattcg aaaagcagtt caacgagaat 60

```

gaagccatcc aatggatgca ggaaaactgg aagaaatcct tcctgttttc tgctctgtat 120
gctgccttta tattcggtgg tcggcaccta atgaataaac gagcaaagtt tgaactgagg 180
aagccattag tgctctggtc tctgaccctt gcagtcttca gtatattcgg tgctcttcga 240
actggtgctt atatggtgta ctttttgatg accaaaggcc tgaagcagtc agtttgtgac 300
caggggtttt acaatggacc tgtcagcaaa ttctgggctt atgcatttgt gctaagcaaa 360
gcaccgaac taggagatac aatattcatt attctgagga agcagaagct gatcttcctg 420
cactggtatc accacatcac tgtgctcctg tactcttggt actcctacaa agacatgggt 480
gccgggggag gttggttcat gactatgaac tatggcgtgc acgccgtgat gtactcttac 540
tatgccttgc gggcggcagg tttccgagtc tcccgggaagt ttgccatggt catcaccttg 600
tcccagatca ctcagatgct gatgggctgt gtggttaact acctgggtct ctgctgggat 660
cagcatgacc agtgtcactc tcactttcag aacatcttct ggctcctact catgtacctc 720
agctaccttg tgctcttctg ccatttcttc tttgaggcct acatcggcaa aatgaggaaa 780
acaacgaag ctgaa 795

```

<210> 223
 <211> 265
 <212> PRT
 <213> Homo sapiens

<400> 223

Met	Asn	Met	Ser	Val	Leu	Thr	Leu	Gln	Glu	Tyr	Glu	Phe	Glu	Lys	Gln
1				5					10					15	
Phe	Asn	Glu	Asn	Glu	Ala	Ile	Gln	Trp	Met	Gln	Glu	Asn	Trp	Lys	Lys
			20					25					30		
Ser	Phe	Leu	Phe	Ser	Ala	Leu	Tyr	Ala	Ala	Phe	Ile	Phe	Gly	Gly	Arg
		35					40					45			
His	Leu	Met	Asn	Lys	Arg	Ala	Lys	Phe	Glu	Leu	Arg	Lys	Pro	Leu	Val
	50					55					60				
Leu	Trp	Ser	Leu	Thr	Leu	Ala	Val	Phe	Ser	Ile	Phe	Gly	Ala	Leu	Arg
65					70				75					80	
Thr	Gly	Ala	Tyr	Met	Val	Tyr	Ile	Leu	Met	Thr	Lys	Gly	Leu	Lys	Gln
				85				90						95	
Ser	Val	Cys	Asp	Gln	Gly	Phe	Tyr	Asn	Gly	Pro	Val	Ser	Lys	Phe	Trp
			100					105					110		
Ala	Tyr	Ala	Phe	Val	Leu	Ser	Lys	Ala	Pro	Glu	Leu	Gly	Asp	Thr	Ile
		115					120					125			
Phe	Ile	Ile	Leu	Arg	Lys	Gln	Lys	Leu	Ile	Phe	Leu	His	Trp	Tyr	His
	130				135					140					
His	Ile	Thr	Val	Leu	Leu	Tyr	Ser	Trp	Tyr	Ser	Tyr	Lys	Asp	Met	Val
145					150				155					160	
Ala	Gly	Gly	Gly	Trp	Phe	Met	Thr	Met	Asn	Tyr	Gly	Val	His	Ala	Val
				165				170						175	
Met	Tyr	Ser	Tyr	Tyr	Ala	Leu	Arg	Ala	Ala	Gly	Phe	Arg	Val	Ser	Arg
		180					185						190		
Lys	Phe	Ala	Met	Phe	Ile	Thr	Leu	Ser	Gln	Ile	Thr	Gln	Met	Leu	Met
		195				200						205			
Gly	Cys	Val	Val	Asn	Tyr	Leu	Val	Phe	Cys	Trp	Met	Gln	His	Asp	Gln
	210					215					220				
Cys	His	Ser	His	Phe	Gln	Asn	Ile	Phe	Trp	Ser	Ser	Leu	Met	Tyr	Leu
225					230				235					240	
Ser	Tyr	Leu	Val	Leu	Phe	Cys	His	Phe	Phe	Phe	Glu	Ala	Tyr	Ile	Gly
				245				250						255	
Lys	Met	Arg	Lys	Thr	Thr	Lys	Ala	Glu							
			260				265								

<210> 224

<211> 46
 <212> PRT
 <213> Homo sapiens

<400> 224
 Met Asn Met Ser Val Leu Thr Leu Gln Glu Tyr Glu Phe Glu Lys Gln
 1 5 10 15
 Phe Asn Glu Asn Glu Ala Ile Gln Trp Met Gln Glu Asn Trp Lys Lys
 20 25 30
 Ser Phe Leu Phe Ser Ala Leu Tyr Ala Ala Phe Ile Phe Gly
 35 40 45

<210> 225
 <211> 219
 <212> PRT
 <213> Homo sapiens

<400> 225
 Gly Arg His Leu Met Asn Lys Arg Ala Lys Phe Glu Leu Arg Lys Pro
 1 5 10 15
 Leu Val Leu Trp Ser Leu Thr Leu Ala Val Phe Ser Ile Phe Gly Ala
 20 25 30
 Leu Arg Thr Gly Ala Tyr Met Val Tyr Ile Leu Met Thr Lys Gly Leu
 35 40 45
 Lys Gln Ser Val Cys Asp Gln Gly Phe Tyr Asn Gly Pro Val Ser Lys
 50 55 60
 Phe Trp Ala Tyr Ala Phe Val Leu Ser Lys Ala Pro Glu Leu Gly Asp
 65 70 75 80
 Thr Ile Phe Ile Ile Leu Arg Lys Gln Lys Leu Ile Phe Leu His Trp
 85 90 95
 Tyr His His Ile Thr Val Leu Leu Tyr Ser Trp Tyr Ser Tyr Lys Asp
 100 105 110
 Met Val Ala Gly Gly Gly Trp Phe Met Thr Met Asn Tyr Gly Val His
 115 120 125
 Ala Val Met Tyr Ser Tyr Tyr Ala Leu Arg Ala Ala Gly Phe Arg Val
 130 135 140
 Ser Arg Lys Phe Ala Met Phe Ile Thr Leu Ser Gln Ile Thr Gln Met
 145 150 155 160
 Leu Met Gly Cys Val Val Asn Tyr Leu Val Phe Cys Trp Met Gln His
 165 170 175
 Asp Gln Cys His Ser His Phe Gln Asn Ile Phe Trp Ser Ser Leu Met
 180 185 190
 Tyr Leu Ser Tyr Leu Val Leu Phe Cys His Phe Phe Phe Glu Ala Tyr
 195 200 205
 Ile Gly Lys Met Arg Lys Thr Thr Lys Ala Glu
 210 215

<210> 226
 <211> 16
 <212> PRT
 <213> Homo sapiens

<400> 226
 Gly Arg His Leu Met Asn Lys Arg Ala Lys Phe Glu Leu Arg Lys Pro
 1 5 10 15

<210> 227
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 227
 Leu Val Leu Trp Ser Leu Thr Leu Ala Val Phe Ser Ile Phe Gly Ala
 1 5 10 15
 Leu

<210> 228
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 228
 Arg Thr Gly Ala Tyr Met Val Tyr Ile Leu Met Thr Lys Gly Leu Lys
 1 5 10 15
 Gln Ser Val Cys Asp Gln Gly Phe Tyr Asn Gly Pro Val Ser Lys Phe
 20 25 30
 Trp Ala Tyr Ala Phe Val Leu Ser Lys Ala Pro Glu Leu Gly Asp Thr
 35 40 45
 Ile Phe Ile Ile Leu Arg Lys Gln Lys
 50 55

<210> 229
 <211> 17
 <212> PRT
 <213> Homo Sapiens

<400> 229
 Leu Ile Phe Leu His Trp Tyr His His Ile Thr Val Leu Leu Tyr Ser
 1 5 10 15
 Trp

<210> 230
 <211> 11
 <212> PRT
 <213> Homo sapiens

<400> 230
 Tyr Ser Tyr Lys Asp Met Val Ala Gly Gly Gly
 1 5 10

<210> 231
 <211> 19
 <212> PRT
 <213> Homo sapiens

<400> 231
 Trp Phe Met Thr Met Asn Tyr Gly Val His Ala Val Met Tyr Ser Tyr
 1 5 10 15
 Tyr Ala Leu

<210> 232
 <211> 10
 <212> PRT
 <213> Homo sapiens

<400> 232
 Arg Ala Ala Gly Phe Arg Val Ser Arg Lys
 1 5 10

<210> 233
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 233
 Phe Ala Met Phe Ile Thr Leu Ser Gln Ile Thr Gln Met Leu Met Gly
 1 5 10 15
 Cys Val Val Asn Tyr Leu Val Phe
 20

<210> 234
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 234
 Cys Trp Met Gln His Asp Gln Cys His Ser His Phe Gln Asn
 1 5 10

<210> 235
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 235
 Ile Phe Trp Ser Ser Leu Met Tyr Leu Ser Tyr Leu Val Leu Phe Cys
 1 5 10 15
 His Phe Phe Phe
 20

<210> 236
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 236
 Glu Ala Tyr Ile Gly Lys Met Arg Lys Thr Thr Lys Ala Glu
 1 5 10

<210> 237

<220>

<223> Unknown

<400> 237
 000

<210> 238
 <211> 813
 <212> DNA
 <213> Homo sapiens

<400> 238
 atggacacat ccatgaatth ctcacgcggg ttaaaaatgg acctgatgca accctatgac 60
 ttcgagacgt ttcaggactt aaggcccttt ttggaggagt actgggtaag ctcatttctc 120
 atagtgggtcg tctatctgtt gctcatcggt gttggccaga cctacatgag aacgcggaag 180
 agcttcagct tgcagaggcc tctcatcctc tggtccttct tcttggaat attcagtatc 240
 ctgggtactc tgaggatgtg gaagtttatg gcaacagtga tgtttacagt gggcctcaag 300
 caaacctgtg gctttgccat ctacacggat gacgccgtag tcagattctg gtcctttctc 360
 tttcttctca gcaagggttg tgaactggga gacacggcct tcatcctcct gcgtaagcgt 420
 ccactcatct ttgtccactg gtaccaccac agcacagtgc tactgttcac aagctttgga 480
 tacaagaaca aagtgccttc ggggtggctgg ttcatgacca tgaactttgg cgtccattct 540
 gtcattgtaca cttactacac tatgaaggct gccaaactga agcatcctaa tcttctcccc 600
 atgggtcatca ccagcctgca gattctgcag atgggttctg gcaccatctt tggcatactg 660
 aattacatct ggaggcagga gaaaggatgc cacacaacaa cggaacactt cttctggtct 720
 tttatgctat atggggaccta tttcatccta ttcgctcact tcttccaccg agcctacctc 780
 aggcccaagg gcaaagttgc atccaagagc caa 813

<210> 239
 <211> 265
 <212> PRT
 <213> Mus sp.

<400> 239
 Met Asn Met Ser Val Leu Thr Leu Gln Glu Tyr Glu Phe Glu Lys Gln
 1 5 10 15
 Phe Asn Glu Asn Glu Ala Ile Gln Trp Met Gln Glu Asn Trp Lys Lys
 20 25 30
 Ser Phe Leu Phe Ser Ala Leu Tyr Ala Ala Phe Ile Phe Gly Gly Arg
 35 40 45
 His Leu Met Asn Lys Arg Ala Lys Phe Glu Leu Arg Lys Pro Leu Val
 50 55 60
 Leu Trp Ser Leu Thr Leu Ala Val Phe Ser Ile Phe Gly Ala Leu Arg
 65 70 75 80
 Thr Gly Ala Tyr Met Val Tyr Ile Leu Met Thr Lys Gly Leu Lys Gln
 85 90 95
 Ser Val Cys Asp Gln Gly Phe Tyr Asn Gly Pro Val Ser Lys Phe Trp
 100 105 110
 Ala Tyr Ala Phe Val Leu Ser Lys Ala Pro Glu Leu Gly Asp Thr Ile
 115 120 125
 Phe Ile Ile Leu Arg Lys Gln Lys Leu Ile Phe Leu His Trp Tyr His

130	135	140
His Ile Thr Val Leu Leu Tyr Ser Trp Tyr Ser Tyr Lys Asp Met Val		
145	150	155
Ala Gly Gly Gly Trp Phe Met Thr Met Asn Tyr Gly Val His Ala Val		160
	165	170
Met Tyr Ser Tyr Trp Ala Leu Arg Ala Ala Gly Phe Arg Val Ser Arg		175
	180	185
Lys Phe Ala Met Phe Ile Thr Leu Ser Gln Ile Thr Gln Met Leu Met		190
	195	200
Gly Cys Val Val Asn Tyr Leu Val Phe Cys Trp Met Gln His Asp Gln		205
	210	215
Cys His Ser His Phe Gln Asn Ile Phe Trp Ser Ser Leu Met Tyr Leu		220
225	230	235
Ser Tyr Leu Val Leu Phe Cys His Phe Phe Glu Ala Tyr Ile Gly		240
	245	250
Lys Met Arg Lys Thr Thr Lys Ala Glu		255
	260	265

<210> 240

<220>

<223> Unknown

<400> 240

000

<210> 241

<211> 2032

<212> DNA

<213> Mus sp.

<400> 241

```

gcctgaagca gtcagtttgt gaccagagtt tttacaatgg acctgtcagc aaatttctggg 60
cttatgcatt tgtgctcagc aaagcaccgg aactaggtga cacgatattc atcatttctga 120
ggaaacagaa actgatcttc ctgcactggg accaccacat cactgtgctc ctgtactcct 180
ggtactccta caaagacatg gtcgctgggg gtgggtgggt catgactatg aactatggcg 240
tgcattgccg catgtactct tactacgcct tgcgggctgc ggggtttccga gtctcccga 300
agtttgccat gttcatcacc ttgtcccaga tcaactcagat gctgatgggc tgtgtcatta 360
actacctggg cttcaactgg atgcagcatg acaacgacca gtgctactcc cactttcaga 420
acatcttctg gtctcgtc atgtacctca gctaccttgt gctcttctgc catttcttct 480
ttgaggccta catcggcaaa gtgaagaaag ccacgaaggc tgagtagtgt cagggctgag 540
gaggaagtca tagctcaggg tcatcacgaa aaataatcga caaaagaaaa atggcacaag 600
gaatcccata tgggtgcagct aaaacaaaac aaaacatccg tatgagcagg cacgaggccc 660
aaggcagctt gggactgaag attaggttgt aagtttatga tcctttctgg gtgaggactc 720
gctgagtgc actcttatct caaagcacgg ctgctgaggg gacccttcc ctctggcctg 780
tcaactctag aacacactag atgcaaaggc agccacgggc aaagagattg ggcagagatt 840
agtggacggc cagcaaaaac ctgcaggaag caggtggggg gaggaatcta ctcagccttt 900
ttgttttgtt ttgttttgtt ttgtttttct ctaaggataa aggagtttcc ccttttcaaa 960
cgatgtgagc acacacacac acacacacac acacacacac acacacacac acacgcaatc 1020
ttttcaacac gaaaccagag ctaaaagaaa agataaacat gggagagaca gggtttctat 1080
ctgggacagc aatgcttttg caaaaggcta ggccttttaa agaaagggtga gcttgtaact 1140
ccttgataaa agatgtctta attattttta ctgcaactga aagtaaagag gtagagcctt 1200
tccccttctg cacagcctca gggcttgtat gttctctaca accaaacaca ggacagtact 1260
tcccccatga tactttatta ctgggagaaa gaaacccttg tagttgaaac accacactga 1320
caactgttat ttctgctctc cgacgagaat tcaagcatcc gttgttcagt tgccccaac 1380
tttaggacgg aggagtaaag gcagaactga aagggaagaa gctcagctgg ctggcctgaa 1440

```

```

aatggagtct tgtaccatgt gtaacaaatg ccagcccatc gtccctggag ctgaacaggg 1500
aggaagggct atgggcagag actagagccg gattcatcca atgtgcagac agcgtgttcg 1560
cctccctccc tgttcgacct cacacataat cctggccttc taaatgaggc cctgtgacac 1620
actctgtgct ttctatatatt ttgtgacttt caaacacaga tctgcagggc tctgcctgat 1680
ttggggtaaa cactgtgttt ctgcagcctc tgcatttgct cccttcagca gtgcagaggg 1740
ttgagaagtg ccctctgctg gcttagtgag aagcttcaac aaacacttca cagtaggttg 1800
aaataactga ccactaaggg cctgcggaga ttaaacccta agttctaagt gctgtcaaac 1860
acctgacata tatttgacca aatcagaaga gagagagaac ctctatgctt caagtaagcg 1920
tcataaattt ttttaagtac tttcacttga gaactcagaa agtcaatgta ttaagagcca 1980
tattctgaaa gaaagaaaga gaaagaaaga aagaaagaaa aaaaaaaaaa aa 2032

```

<210> 242
 <211> 522
 <212> DNA
 <213> Mus sp.

```

<400> 242
ctgaagcagt cagtttgtga ccagagtttt tacaatggac ctgtcagcaa attctgggct 60
tatgcatttg tgctcagcaa agcacccgaa ctaggtgaca cgatattcat cattctgagg 120
aaacagaaac tgatcttcct gcaactggta caccacatca ctgtgctcct gtactcctgg 180
tactcctaca aagacatggg cgctgggggt ggttggttca tgactatgaa ctatggcgtg 240
catgccgtca tgtactctta ctacgccttg cgggctgcgg gtttccgagt ctcccgaag 300
tttgccatgt tcatcacctt gtcccagatc actcagatgc tgatgggctg tgcattaac 360
tacctggtct tcaactggat gcagcatgac aacgaccagt gctactccca ctttcagaac 420
atcttctggg cctcgtcat gtacctcagc taccttgtgc tcttctgcca tttcttctt 480
gaggcctaca tcggcaaagt gaagaaagcc acgaaggctg ag 522

```

<210> 243
 <211> 174
 <212> PRT
 <213> Mus sp.

```

<400> 243
Leu Lys Gln Ser Val Cys Asp Gln Ser Phe Tyr Asn Gly Pro Val Ser
 1          5          10          15
Lys Phe Trp Ala Tyr Ala Phe Val Leu Ser Lys Ala Pro Glu Leu Gly
 20          25          30
Asp Thr Ile Phe Ile Ile Leu Arg Lys Gln Lys Leu Ile Phe Leu His
 35          40          45
Trp Tyr His His Ile Thr Val Leu Leu Tyr Ser Trp Tyr Ser Tyr Lys
 50          55          60
Asp Met Val Ala Gly Gly Gly Trp Phe Met Thr Met Asn Tyr Gly Val
 65          70          75          80
His Ala Val Met Tyr Ser Tyr Tyr Ala Leu Arg Ala Ala Gly Phe Arg
 85          90          95
Val Ser Arg Lys Phe Ala Met Phe Ile Thr Leu Ser Gln Ile Thr Gln
100          105          110
Met Leu Met Gly Cys Val Ile Asn Tyr Leu Val Phe Asn Trp Met Gln
115          120          125
His Asp Asn Asp Gln Cys Tyr Ser His Phe Gln Asn Ile Phe Trp Ser
130          135          140
Ser Leu Met Tyr Leu Ser Tyr Leu Val Leu Phe Cys His Phe Phe Phe
145          150          155          160
Glu Ala Tyr Ile Gly Lys Val Lys Lys Ala Thr Lys Ala Glu
          165          170

```

<210> 244
 <211> 49
 <212> PRT
 <213> Mus sp.

<400> 244
 Leu Lys Gln Ser Val Cys Asp Gln Ser Phe Tyr Asn Gly Pro Val Ser
 1 5 10 15
 Lys Phe Trp Ala Tyr Ala Phe Val Leu Ser Lys Ala Pro Glu Leu Gly
 20 25 30
 Asp Thr Ile Phe Ile Ile Leu Arg Lys Gln Lys Leu Ile Phe Leu His
 35 40 45
 Trp

<210> 245
 <211> 17
 <212> PRT
 <213> Mus sp.

<400> 245
 Tyr His His Ile Thr Val Leu Leu Tyr Ser Trp Tyr Ser Tyr Lys Asp
 1 5 10 15
 Met

<210> 246
 <211> 11
 <212> PRT
 <213> Mus sp.

<400> 246
 Val Ala Gly Gly Gly Trp Phe Met Thr Met Asn
 1 5 10

<210> 247
 <211> 19
 <212> PRT
 <213> Mus sp.

<400> 247
 Tyr Gly Val His Ala Val Met Tyr Ser Tyr Tyr Ala Leu Arg Ala Ala
 1 5 10 15
 Gly Phe Arg

<210> 248
 <211> 10
 <212> PRT
 <213> Mus sp.

<400> 248

Val Ser Arg Lys Phe Ala Met Phe Ile Thr
 1 5 10

<210> 249
 <211> 24
 <212> PRT
 <213> Mus sp.

<400> 249
 Leu Ser Gln Ile Thr Gln Met Leu Met Gly Cys Val Ile Asn Tyr Leu
 1 5 10 15
 Val Phe Asn Trp Met Gln His Asp
 20

<210> 250
 <211> 16
 <212> PRT
 <213> Mus sp.

<400> 250
 Asn Asp Gln Cys Tyr Ser His Phe Gln Asn Ile Phe Trp Ser Ser Leu
 1 5 10 15

<210> 251
 <211> 974
 <212> DNA
 <213> Rattus sp.

<400> 251
 ctaggtgata cgatattcat cattctgagg aagcagaagc tgatcttcct gcactgggtac 60
 caccacatca ctgtgctcct gtactcttgg tactcctaca aagacatggg agctgggggt 120
 ggttggttca tgactatgaa ctatggcgta cagcccgta tgtactctta ctacgccttg 180
 cgggctgcgg gtttccgggt ctcccgaag tttgccatgt tcatcacgtt gtcccagatc 240
 actcagatgc tgatgggctg tgtcattaac tacctgggtc tcaactggat gcagcatgac 300
 aatgaccagt gctactccca ctttcagaac atcttctggg cctcactcat gtacctcagc 360
 taccttctgc tcttctgccca tttcttcttt gaggcctaca tgggcaaagt gaagaaagcg 420
 acgaaggccg agtagtgtca gagctgagga ggaagacata gctcagggtc atcacgaaaa 480
 ataatagaca aaaagaaaat ggcacaagga atcacatatg gtgcagctaa aacaaaacaa 540
 aacattatga gcagacgcta agcccaaggc agcttgggag tgaagattag gttgtaagtt 600
 tatgatacct tttgggtgag gactcactga gaacactgct gctgagggac ccccttcctc 660
 cttacctgtc aactctagaa cacactagaa gccaaaggcag ccatgggcaa ggagattagt 720
 ggacagcaag caaaacactg caggaagagg ggggagatct attcagagtt ttttgttttg 780
 ttttgttttg tttttctcta aggataaagg agtttccctt tttcaaactg tgtgagcaca 840
 cccacgcgca tgcagacaca cccacctaca cactatctgc agatgaccag tgtcctatgc 900
 tgttttttaca aataaacttg agacaagaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 960
 aaaaaaaaaa aaaa 974

<210> 252
 <211> 432
 <212> DNA
 <213> Rattus sp.

<400> 252
 ctaggtgata cgatattcat cattctgagg aagcagaagc tgatcttcct gcactgggtac 60

caccacatca ctgtgctcct gtactcttgg tactcctaca aagacatggg agctgggggt 120
 gggttggttca tgactatgaa ctatggcgta cacgccgtca tgtactctta ctacgccttg 180
 cgggctgctg gtttccgggt ctcccgggaag tttgccatgt tcatcacgtt gtcccagatc 240
 actcagatgc tgatgggctg tgtcattaac tacctgggtc tcaactggat gcagcatgac 300
 aatgaccagt gctactccca ctttcagaac atcttctggt cctcactcat gtacctcagc 360
 taccttctgc tcttctgcca tttcttcttt gaggcctaca tcggcaaagt gaagaaagcg 420
 acgaaggccg ag 432

<210> 253

<211> 144

<212> PRT

<213> Rattus sp.

<400> 253

Leu	Gly	Asp	Thr	Ile	Phe	Ile	Ile	Leu	Arg	Lys	Gln	Lys	Leu	Ile	Phe
1				5				10					15		
Leu	His	Trp	Tyr	His	His	Ile	Thr	Val	Leu	Leu	Tyr	Ser	Trp	Tyr	Ser
			20					25					30		
Tyr	Lys	Asp	Met	Val	Ala	Gly	Gly	Gly	Trp	Phe	Met	Thr	Met	Asn	Tyr
		35				40					45				
Gly	Val	His	Ala	Val	Met	Tyr	Ser	Tyr	Tyr	Ala	Leu	Arg	Ala	Ala	Gly
	50					55					60				
Phe	Arg	Val	Ser	Arg	Lys	Phe	Ala	Met	Phe	Ile	Thr	Leu	Ser	Gln	Ile
65				70					75						80
Thr	Gln	Met	Leu	Met	Gly	Cys	Val	Ile	Asn	Tyr	Leu	Val	Phe	Asn	Trp
				85					90					95	
Met	Gln	His	Asp	Asn	Asp	Gln	Cys	Tyr	Ser	His	Phe	Gln	Asn	Ile	Phe
			100					105					110		
Trp	Ser	Ser	Leu	Met	Tyr	Leu	Ser	Tyr	Leu	Leu	Leu	Phe	Cys	His	Phe
		115				120						125			
Phe	Phe	Glu	Ala	Tyr	Ile	Gly	Lys	Val	Lys	Lys	Ala	Thr	Lys	Ala	Glu
	130					135					140				

<210> 254

<220>

<223> Unknown

<400> 254

000

<210> 255

<220>

<223> Unknown

<400> 255

000

<210> 256

<220>

<223> Unknown

<400> 256

000
<210> 257
<220>
<223> Unknown
<400> 257
000
<210> 258
<220>
<223> Unknown
<400> 258
000
<210> 259
<220>
<223> Unknown
<400> 259
000
<210> 260
<220>
<223> Unknown
<400> 260
000
<210> 261
<220>
<223> Unknown
<400> 261
000
<210> 262
<220>
<223> Unknown
<400> 262
000
<210> 263
<220>
<223> Unknown
<400> 263
000

<210> 264

<220>

<223> Unknown

<400> 264

000

<210> 265

<220>

<223> Unknown

<400> 265

000

<210> 266

<220>

<223> Unknown

<400> 266

000

<210> 267

<220>

<223> Unknown

<400> 267

000

<210> 268

<220>

<223> Unknown

<400> 268

000

<210> 269

<220>

<223> Unknown

<400> 269

000

<210> 270

<220>

<223> Unknown

<400> 270

000

<210> 271
 <211> 2895
 <212> DNA
 <213> Homo sapiens

```

<400> 271
gtcgacccac gcggtccgggg agcgcgggcta agagtgccgc accgcctcac aacctgggaa 60
ccggagagta gggggccgtcg gctggcaaga acccgccgtg cctcctcggc aagggccatc 120
cgggtgccacc catgtcgcac tagagcagaa gagggtgagt cctgaactgc aacctgcaca 180
gagctgctct gtactgtccc tgggtggtcgc cgccatgacc tgggttgggtgc tgctggggac 240
actgctctgc atgtcgcgcg ttgggttagg caccgccggac tccgaggggt tccccccccg 300
tgcgctccac aactgcccct acaaatgtat ctgcgtgcgc gacctgctaa gctgcaactg 360
cctagggctg caggacgtgc cagccgagtt acctgccgt actgcggacc tcgacctgag 420
ccacaacgcg ctccagcgcc tgcgcccccg ctgggtggcg cccctcttcc agctgcgcgc 480
cctgcaccta gaccacaacg aactagatgc gctgggtcgc ggcgctcttcg tcaacgccag 540
cggcctgagg ctgctcgatc tatcatctaa cacgttgccg gcgcttggcc gccacgacct 600
cgacgggctg ggggcgctgg agaagctgct tctgttcaat aaccgcttgg tgcacttggg 660
cgagcatgcc ttccacggcc tgcgcgcgct cagccatctc tacctgggct gcaacgaact 720
cgctctgttc tccttcgacc acctgcacgg tctgagcgcc acccacctgc ttactctgga 780
cctctcctcc aaccggctgg gacacatctc cgtacctgag ctggccgcgc tgccggcctt 840
cctcaagaac ggcctctact tgcacaacaa ccctttgcct tgcgactgcc gcctctacca 900
cctgctacag cgctggcacc agcggggcct gagcgccgtg cgcgactttg cgcgcgagta 960
cgtatgcttg gccttcaagg taccgcgctc ccgcgtgcgc ttcttccagc acagccgctg 1020
ctttgagaac tgctcgtcgg ccccagctct tggcctaaag cggccggaag agcacctgta 1080
cgcgctgggt ggtcgggtccc tgaggcttta ctgcaacacc agcgtcccgg ccatgcgcat 1140
tgcctgggtt tcgccgcagc aggagcttct cagggcgcca ggatcccgcg atggcagcat 1200
cgcggtgctg gccgacggca gcttggccat aggcaacgta caggagcagc atgctgggact 1260
cttctgtgtg ctggccactg ggccccgcct gcaccacaac cagacgcacg agtacaacgt 1320
gagcgtgcac tttccgcgcc cagagcccga ggctttcaac acaggettca ccacactgct 1380
gggctgtgcc gtgggccttg tgctcgtgct gctctacctg ttgcgccac cctgccgctg 1440
ctgccgcgct gectgcccgc tgcgcgcgct gggcccaaac acccagcccg ctccaagagc 1500
tgagccgcac aagtccctcag tactcagcac cacaccgcca gacgcaccca gcccgaagg 1560
ccaagcgctc acaagcacgt agtctttctg gagccaggcc ggaggggcct caatggcccc 1620
cgtgcagctg gcagtagctg aggaattcga tctctacaac cctggaggcc tgcagctgaa 1680
ggctggctct gagtccgcca gctccatagg ctccgagggt cccatgacaa cctagactgc 1740
cagggctccc ccacccaggc ccccaccctc ttgctgctcg ccctgctccc tgcttcggtc 1800
cagagaactg gcagatactg gtgggaagca ctgtgcctgg cccccagct tcctgtatgg 1860
gcctcgaaac acaatgggcc ttctcgtctc ctggtagaga caggggttgt ggtccccaac 1920
ctgccttctg ctctgcccct gcacaggacc caaaggcccc aggccctgca aggtgtgcta 1980
gttctgtctt tcccgcggac ttcttagtgc ccaaattgcc tgtgaggctg agagaccag 2040
gcccctgtgg ctttcaacac agcacagctg tggaaagtggc tgtgttcttc tacagcctgt 2100
ggaagaaccc ctgtagcaga gcctcccatc caccctcagg ggctgaggca gctctcagg 2160
agtgggtgctc aagagctgac gcagggccac ctccccttcc caagggggtg ggagggagt 2220
ggccacagag gaaaagaagg cggctctgaa ggaagatctc gccacacccc caggacagaa 2280
agaggaaaca agcccgcctt ctggtgaaat gggactccct ccatccacca acaccaacc 2340
tcctgaaagc ttcacaactt cacgcagagt ccggtggcag gcaccaggca ggaaaggctc 2400
ctcaagaggt tcttgggtgt ctggcctaag cccagccag aggccctgct ctctctggcc 2460
tgggcatccc accggttgtt ctgaaggcag agccattct gtgggctcac aagacacagt 2520
gaaggggatc atggcctgca cccctgcttt tcagcagtaa aaagcccga aagcctggcg 2580
agcatggccg agctgggagg gccgagccgg aactccacgt ccctcgagag caggagcctc 2640
ttaagggctg gcaactggtc cagcctaatt gctgaggcgg taccctggct tcatatgcat 2700
ctcactgctc ccactgcagg ggggcaggga aggggggtct gggagccctt catgtgtggg 2760
ggccgagctg ggggccccca tggccatcct ggacctcgct gctccagagt ttaataaagg 2820
tagcacatgc ttattgctag aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2880
aaaaagggcg gccgcg 2895

```

<210> 272
 <211> 1365
 <212> DNA
 <213> Homo sapiens

<400> 272
 atgacctggt tgggtgctgct ggggacactg ctctgcatgc tgcgcgttgg gttaggcacc 60
 ccggactccg aggggtttccc gccccgtgcg ctccacaact gcccctacaa atgtatctgc 120
 gctgccgacc tgctaagctg cactggccta gggctgcagg acgtgccagc cgagttacct 180
 gccgctactg cggacctcga cctgagccac aacgcgctcc agcgccctgcg ccccggtggt 240
 ttggcgcccc tcttccagct gcgcgcccctg cacctagacc acaacgaact agatgcgctg 300
 ggtcgcgggcg tcttcgtcaa cgccagcggc ctgaggctgc tcgatctatc atctaacacg 360
 ttgccccgcg ttggccgcca cgacctcgac gggctggggg cgctggagaa gctgcttctg 420
 ttcaataacc gcttgggtgca cttggacgag catgccttcc acggcctgcg cgcgctcagc 480
 catctctacc tgggtgcaa cgaactcgcc tcgttctcct tcgaccacct gcacggtctg 540
 agcgccaccc acctgcttac tctggacctc tcctccaacc ggctgggaca catctccgta 600
 cctgagctgg ccgcgctgcc ggccttcctc aagaacggcc tctacttgca caacaaccct 660
 ttgccttgcg actgccgcct ctaccacctg ctacagcgct ggcaccagcg gggcctgagc 720
 gccgtgcgcg actttgcgcg cgagtacgta tgcttggcct tcaaggtacc cgcgtcccgc 780
 gtgcgcttct tccagcacag ccgcgtcttt gagaactgct cgtcggcccc agctcttggc 840
 ctaaagcggc cggaagagca cctgtacgcy ctggtgggtc ggtccctgag gctttactgc 900
 aacaccagcg tccccggccat gcgcattgcc tgggtttcgc cgcagcagga gcttctcagg 960
 gcgccaggat cccgcgatgg cagcatcgcy gtgctggccg acggcagctt ggccataggc 1020
 aacgtacagg agcagcatgc gggactcttc gtgtgcctgg ccaactgggc ccgcctgcac 1080
 cacaaccaga cgcacgagta caacgtgagc gtgcactttc cgcgcccaga gcccgaggct 1140
 ttcaacacag gcttcaccac actgctgggc tgtgccgtgg gccttgtgct cgtgctgctc 1200
 tacctgttcg cccaccctg ccgctgctgc cgccgtgcct gcccgctgcc gccgctggcc 1260
 ccaaaccacc agcccgctcc aagagctgag ccgcacaagt cctcagtact cagcaccaca 1320
 ccgccagacg caccagcccc gcaaggccaa gcgtccacaa gcacg 1365

<210> 273
 <211> 455
 <212> PRT
 <213> Homo sapiens

<400> 273
 Met Thr Trp Leu Val Leu Leu Gly Thr Leu Leu Cys Met Leu Arg Val
 1 5 10 15
 Gly Leu Gly Thr Pro Asp Ser Glu Gly Phe Pro Pro Arg Ala Leu His
 20 25 30
 Asn Cys Pro Tyr Lys Cys Ile Cys Ala Ala Asp Leu Leu Ser Cys Thr
 35 40 45
 Gly Leu Gly Leu Gln Asp Val Pro Ala Glu Leu Pro Ala Ala Thr Ala
 50 55 60
 Asp Leu Asp Leu Ser His Asn Ala Leu Gln Arg Leu Arg Pro Gly Trp
 65 70 75 80
 Leu Ala Pro Leu Phe Gln Leu Arg Ala Leu His Leu Asp His Asn Glu
 85 90 95
 Leu Asp Ala Leu Gly Arg Gly Val Phe Val Asn Ala Ser Gly Leu Arg
 100 105 110
 Leu Leu Asp Leu Ser Ser Asn Thr Leu Arg Ala Leu Gly Arg His Asp
 115 120 125
 Leu Asp Gly Leu Gly Ala Leu Glu Lys Leu Leu Leu Phe Asn Asn Arg
 130 135 140
 Leu Val His Leu Asp Glu His Ala Phe His Gly Leu Arg Ala Leu Ser
 145 150 155 160

His	Leu	Tyr	Leu	Gly	Cys	Asn	Glu	Leu	Ala	Ser	Phe	Ser	Phe	Asp	His
				165					170					175	
Leu	His	Gly	Leu	Ser	Ala	Thr	His	Leu	Leu	Thr	Leu	Asp	Leu	Ser	Ser
			180					185					190		
Asn	Arg	Leu	Gly	His	Ile	Ser	Val	Pro	Glu	Leu	Ala	Ala	Leu	Pro	Ala
		195					200					205			
Phe	Leu	Lys	Asn	Gly	Leu	Tyr	Leu	His	Asn	Asn	Pro	Leu	Pro	Cys	Asp
	210					215					220				
Cys	Arg	Leu	Tyr	His	Leu	Leu	Gln	Arg	Trp	His	Gln	Arg	Gly	Leu	Ser
225					230					235					240
Ala	Val	Arg	Asp	Phe	Ala	Arg	Glu	Tyr	Val	Cys	Leu	Ala	Phe	Lys	Val
			245						250					255	
Pro	Ala	Ser	Arg	Val	Arg	Phe	Phe	Gln	His	Ser	Arg	Val	Phe	Glu	Asn
			260					265					270		
Cys	Ser	Ser	Ala	Pro	Ala	Leu	Gly	Leu	Lys	Arg	Pro	Glu	Glu	His	Leu
		275					280					285			
Tyr	Ala	Leu	Val	Gly	Arg	Ser	Leu	Arg	Leu	Tyr	Cys	Asn	Thr	Ser	Val
	290					295					300				
Pro	Ala	Met	Arg	Ile	Ala	Trp	Val	Ser	Pro	Gln	Gln	Glu	Leu	Leu	Arg
305					310					315					320
Ala	Pro	Gly	Ser	Arg	Asp	Gly	Ser	Ile	Ala	Val	Leu	Ala	Asp	Gly	Ser
			325						330					335	
Leu	Ala	Ile	Gly	Asn	Val	Gln	Glu	Gln	His	Ala	Gly	Leu	Phe	Val	Cys
			340					345					350		
Leu	Ala	Thr	Gly	Pro	Arg	Leu	His	His	Asn	Gln	Thr	His	Glu	Tyr	Asn
		355					360					365			
Val	Ser	Val	His	Phe	Pro	Arg	Pro	Glu	Pro	Glu	Ala	Phe	Asn	Thr	Gly
	370					375					380				
Phe	Thr	Thr	Leu	Leu	Gly	Cys	Ala	Val	Gly	Leu	Val	Leu	Val	Leu	Leu
385					390					395					400
Tyr	Leu	Phe	Ala	Pro	Pro	Cys	Arg	Cys	Cys	Arg	Arg	Ala	Cys	Pro	Leu
			405					410						415	
Pro	Pro	Leu	Ala	Pro	Asn	Thr	Gln	Pro	Ala	Pro	Arg	Ala	Glu	Pro	His
			420					425					430		
Lys	Ser	Ser	Val	Leu	Ser	Thr	Thr	Pro	Pro	Asp	Ala	Pro	Ser	Pro	Gln
		435					440					445			
Gly	Gln	Ala	Ser	Thr	Ser	Thr									
	450					455									

<210> 274
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 274
 Met Thr Trp Leu Val Leu Leu Gly Thr Leu Leu Cys Met Leu Arg Val
 1 5 10 15
 Gly Leu Gly Thr
 20

<210> 275
 <211> 435
 <212> PRT

<213> Homo sapiens

<400> 275

Pro	Asp	Ser	Glu	Gly	Phe	Pro	Pro	Arg	Ala	Leu	His	Asn	Cys	Pro	Tyr
1				5					10					15	
Lys	Cys	Ile	Cys	Ala	Ala	Asp	Leu	Leu	Ser	Cys	Thr	Gly	Leu	Gly	Leu
			20					25					30		
Gln	Asp	Val	Pro	Ala	Glu	Leu	Pro	Ala	Ala	Thr	Ala	Asp	Leu	Asp	Leu
		35					40					45			
Ser	His	Asn	Ala	Leu	Gln	Arg	Leu	Arg	Pro	Gly	Trp	Leu	Ala	Pro	Leu
		50				55					60				
Phe	Gln	Leu	Arg	Ala	Leu	His	Leu	Asp	His	Asn	Glu	Leu	Asp	Ala	Leu
65					70					75					80
Gly	Arg	Gly	Val	Phe	Val	Asn	Ala	Ser	Gly	Leu	Arg	Leu	Leu	Asp	Leu
				85					90					95	
Ser	Ser	Asn	Thr	Leu	Arg	Ala	Leu	Gly	Arg	His	Asp	Leu	Asp	Gly	Leu
			100					105					110		
Gly	Ala	Leu	Glu	Lys	Leu	Leu	Leu	Phe	Asn	Asn	Arg	Leu	Val	His	Leu
			115				120						125		
Asp	Glu	His	Ala	Phe	His	Gly	Leu	Arg	Ala	Leu	Ser	His	Leu	Tyr	Leu
			130			135					140				
Gly	Cys	Asn	Glu	Leu	Ala	Ser	Phe	Ser	Phe	Asp	His	Leu	His	Gly	Leu
145					150					155					160
Ser	Ala	Thr	His	Leu	Leu	Thr	Leu	Asp	Leu	Ser	Ser	Asn	Arg	Leu	Gly
				165					170					175	
His	Ile	Ser	Val	Pro	Glu	Leu	Ala	Ala	Leu	Pro	Ala	Phe	Leu	Lys	Asn
			180					185						190	
Gly	Leu	Tyr	Leu	His	Asn	Asn	Pro	Leu	Pro	Cys	Asp	Cys	Arg	Leu	Tyr
		195					200					205			
His	Leu	Leu	Gln	Arg	Trp	His	Gln	Arg	Gly	Leu	Ser	Ala	Val	Arg	Asp
		210				215						220			
Phe	Ala	Arg	Glu	Tyr	Val	Cys	Leu	Ala	Phe	Lys	Val	Pro	Ala	Ser	Arg
225					230					235					240
Val	Arg	Phe	Phe	Gln	His	Ser	Arg	Val	Phe	Glu	Asn	Cys	Ser	Ser	Ala
				245						250				255	
Pro	Ala	Leu	Gly	Leu	Lys	Arg	Pro	Glu	Glu	His	Leu	Tyr	Ala	Leu	Val
			260					265					270		
Gly	Arg	Ser	Leu	Arg	Leu	Tyr	Cys	Asn	Thr	Ser	Val	Pro	Ala	Met	Arg
		275					280						285		
Ile	Ala	Trp	Val	Ser	Pro	Gln	Gln	Glu	Leu	Leu	Arg	Ala	Pro	Gly	Ser
		290				295						300			
Arg	Asp	Gly	Ser	Ile	Ala	Val	Leu	Ala	Asp	Gly	Ser	Leu	Ala	Ile	Gly
305					310						315				320
Asn	Val	Gln	Glu	Gln	His	Ala	Gly	Leu	Phe	Val	Cys	Leu	Ala	Thr	Gly
				325						330				335	
Pro	Arg	Leu	His	His	Asn	Gln	Thr	His	Glu	Tyr	Asn	Val	Ser	Val	His
			340					345					350		
Phe	Pro	Arg	Pro	Glu	Pro	Glu	Ala	Phe	Asn	Thr	Gly	Phe	Thr	Thr	Leu
		355					360					365			
Leu	Gly	Cys	Ala	Val	Gly	Leu	Val	Leu	Val	Leu	Leu	Tyr	Leu	Phe	Ala
		370				375					380				
Pro	Pro	Cys	Arg	Cys	Cys	Arg	Arg	Ala	Cys	Pro	Leu	Pro	Pro	Leu	Ala
385					390					395					400
Pro	Asn	Thr	Gln	Pro	Ala	Pro	Arg	Ala	Glu	Pro	His	Lys	Ser	Ser	Val
				405					410					415	
Leu	Ser	Thr	Thr	Pro	Pro	Asp	Ala	Pro	Ser	Pro	Gln	Gly	Gln	Ala	Ser
			420					425					430		

Thr Ser Thr
435

<210> 276
<211> 363
<212> PRT
<213> Homo sapiens

<400> 276
Pro Asp Ser Glu Gly Phe Pro Pro Arg Ala Leu His Asn Cys Pro Tyr
1 5 10 15
Lys Cys Ile Cys Ala Ala Asp Leu Leu Ser Cys Thr Gly Leu Gly Leu
20 25 30
Gln Asp Val Pro Ala Glu Leu Pro Ala Ala Thr Ala Asp Leu Asp Leu
35 40 45
Ser His Asn Ala Leu Gln Arg Leu Arg Pro Gly Trp Leu Ala Pro Leu
50 55 60
Phe Gln Leu Arg Ala Leu His Leu Asp His Asn Glu Leu Asp Ala Leu
65 70 75 80
Gly Arg Gly Val Phe Val Asn Ala Ser Gly Leu Arg Leu Leu Asp Leu
85 90 95
Ser Ser Asn Thr Leu Arg Ala Leu Gly Arg His Asp Leu Asp Gly Leu
100 105 110
Gly Ala Leu Glu Lys Leu Leu Leu Phe Asn Asn Arg Leu Val His Leu
115 120 125
Asp Glu His Ala Phe His Gly Leu Arg Ala Leu Ser His Leu Tyr Leu
130 135 140
Gly Cys Asn Glu Leu Ala Ser Phe Ser Phe Asp His Leu His Gly Leu
145 150 155 160
Ser Ala Thr His Leu Leu Thr Leu Asp Leu Ser Ser Asn Arg Leu Gly
165 170 175
His Ile Ser Val Pro Glu Leu Ala Ala Leu Pro Ala Phe Leu Lys Asn
180 185 190
Gly Leu Tyr Leu His Asn Asn Pro Leu Pro Cys Asp Cys Arg Leu Tyr
195 200 205
His Leu Leu Gln Arg Trp His Gln Arg Gly Leu Ser Ala Val Arg Asp
210 215 220
Phe Ala Arg Glu Tyr Val Cys Leu Ala Phe Lys Val Pro Ala Ser Arg
225 230 235 240
Val Arg Phe Phe Gln His Ser Arg Val Phe Glu Asn Cys Ser Ser Ala
245 250 255
Pro Ala Leu Gly Leu Lys Arg Pro Glu Glu His Leu Tyr Ala Leu Val
260 265 270
Gly Arg Ser Leu Arg Leu Tyr Cys Asn Thr Ser Val Pro Ala Met Arg
275 280 285
Ile Ala Trp Val Ser Pro Gln Gln Glu Leu Leu Arg Ala Pro Gly Ser
290 295 300
Arg Asp Gly Ser Ile Ala Val Leu Ala Asp Gly Ser Leu Ala Ile Gly
305 310 315 320
Asn Val Gln Glu Gln His Ala Gly Leu Phe Val Cys Leu Ala Thr Gly
325 330 335
Pro Arg Leu His His Asn Gln Thr His Glu Tyr Asn Val Ser Val His
340 345 350
Phe Pro Arg Pro Glu Pro Glu Ala Phe Asn Thr
355 360

<210> 277
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 277
 Gly Phe Thr Thr Leu Leu Gly Cys Ala Val Gly Leu Val Leu Val Leu
 1 5 10 15
 Leu Tyr Leu Phe
 20

<210> 278
 <211> 52
 <212> PRT
 <213> Homo sapiens

<400> 278
 Ala Pro Pro Cys Arg Cys Cys Arg Arg Ala Cys Pro Leu Pro Pro Leu
 1 5 10 15
 Ala Pro Asn Thr Gln Pro Ala Pro Arg Ala Glu Pro His Lys Ser Ser
 20 25 30
 Val Leu Ser Thr Thr Pro Pro Asp Ala Pro Ser Pro Gln Gly Gln Ala
 35 40 45
 Ser Thr Ser Thr
 50

<210> 279
 <211> 1518
 <212> DNA
 <213> Homo sapiens

<400> 279
 gtcgacccac gcgtccggcg aaccccagcg tccgccgaca tggcctggac caagtaccag 60
 ctgttctctgg ccgggctcat gcttgttacc ggctccatca acacgctctc ggcaaaatgg 120
 gcggacaatt tcatggccga gggctgtgga gggagcaagg agcacagctt ccagcatccc 180
 ttctctccagg cagtgggcat gttcctggga gaattctcct gcctggctgc cttctacctc 240
 ctccgatgca gagctgcagg gcaatcagac tccagcgtag acccccagca gcccttcaac 300
 cctcttctttt tcttgcccc agcgtctctgt gacatgacag ggaccagcct catgtatgtg 360
 gctctgaaca tgaccagtgc ctccagcttc cagatgctgc ggggtgcagt gatcatattc 420
 actggcctgt tctcgggtggc cttcctgggc cggaggctgg tgctgagcca gtggctgggc 480
 atcctagcca ccacgcggg gctggtggtc gtgggcctgg ctgacctcct gagcaagcac 540
 gacagtcagc acaagctcag cgaagtgatc acaggggacc tgttgatcat catggcccag 600
 atcatcggtt ccacccagat ggtgctagag gagaagttcg tctacaaaca caatgtgcac 660
 ccaactgctgg cagttggcac tgagggcctc tttggctttg tgatcctctc cctgctgctg 720
 gtgcccattg actacatccc cgccggctcc ttcagcggaa accctcgtgg gacactggag 780
 gatgcattgg acgccttctg ccagggtggc cagcagccgc tcattgccgt ggcaactgctg 840
 ggcaacatca gcagcattgc cttcttcaac ttgcgaggca tcagcgtcac caaggaactg 900
 agcgccacca cccgcattgt gttggacagc ttgcgcaccg ttgtcatctg ggcactgagc 960
 ctggcactgg gctgggaggg cttccatgca ctgcagatcc ttggcttctc catactcctt 1020
 ataggcactg cctctacaaa tgggctacac cgtccgctgc tgggccgcct gtccaggggc 1080
 cggccctctg cagaggagag cgagcaggag agactgctgg gtggcaccgc cactcccatc 1140
 aatgatgcca gctgagggtt cctggaggct tctactgcca cccgggtgct ccttctcctt 1200
 gagactgagg ccacacaggc tgggtggccc cgaatgcctt atccccaagg cctcacctgt 1260


```

tccccctccct gcagaacccc cagggcagct gctgccacag aagataacaa caccaagtc 1320
ctcttttttct cactaccacc tgcaggggtgg tgttaccag cccccacaag cctgagtgc 1380
gtggcagacc tcagctctct ggacccctcc tacagcacta gagctaaatc atgaagttga 1440
attgtaggaa tttaccaccg tagtgtatct gaatcataaa ctagattatc ataaaaaaaa 1500
aaaaaaaaagg gcggccgc 1518

```

```

<210> 280
<211> 1113
<212> DNA
<213> Homo sapiens

```

```

<400> 280
atggcctgga ccaagtacca gctgttcttg gccgggctca tgcttggttac cggctccatc 60
aacacgctct cggcaaaaatg ggcggacaat ttcattggccg agggctgttg agggagcaag 120
gagcacagct tccagcatcc ctctctccag gcagtgggca tgctcctggg agaattctcc 180
tgcttggttg ccttctacct cctccgatgc agagctgcag ggcaatcaga ctccagcgta 240
gacccccagc agcccttcaa ccctcttctt ttcttgcctc cagcgtctctg tgacatgaca 300
gggaccagcc tcatgtatgt ggctctgaac atgaccagtg cctccagctt ccagatgctg 360
cgggggtgcag tgatcatatt cactggcctg ttctcggtgg ccttctctggg ccggaggctg 420
gtgctgagcc agtggtctggg cactctagcc accatcgccg ggctgggtgg cgtgggcctg 480
gctgacctcc tgagcaagca cgacagtcag cacaagctca gcgaagtgat cacaggggac 540
ctgttgatca tcatggccca gatcatcggt gccatccaga tgggtgctaga ggagaagttc 600
gtctacaaac acaatgtgca cccactgcgg gcagtgggca ctgagggcct ctttggtctt 660
gtgactctct ccctgtctgt ggtgcccatt tactacatcc ccgccggctc cttcagcgga 720
aaccctcgtg ggacactgga ggatgcattg gacgccttct gccaggtggg ccagcagccg 780
ctcattgccg tggcactgct gggcaacatc agcagcattg ccttcttcaa cttcgcaggc 840
atcagcgtca ccaaggaact gagcgccacc acccgcatgg tgttggacag cttgcgcacc 900
gttgatcatc gggcactgag cctggcactg ggctgggagg ccttccatgc actgcagatc 960
cttggcttcc tcatactcct tataggcact gccctctaca atgggctaca ccgtccgctg 1020
ctgggcccgc tgtccagggg ccggcccctg gcagaggaga gcgagcagga gagactgctg 1080
ggtggcaccg gcactcccat caatgatgcc agc 1113

```

```

<210> 281
<211> 371
<212> PRT
<213> Homo sapiens

```

```

<400> 281
Met Ala Trp Thr Lys Tyr Gln Leu Phe Leu Ala Gly Leu Met Leu Val
1 5 10 15
Thr Gly Ser Ile Asn Thr Leu Ser Ala Lys Trp Ala Asp Asn Phe Met
20 25 30
Ala Glu Gly Cys Gly Gly Ser Lys Glu His Ser Phe Gln His Pro Phe
35 40 45
Leu Gln Ala Val Gly Met Phe Leu Gly Glu Phe Ser Cys Leu Ala Ala
50 55 60
Phe Tyr Leu Leu Arg Cys Arg Ala Ala Gly Gln Ser Asp Ser Ser Val
65 70 75 80
Asp Pro Gln Gln Pro Phe Asn Pro Leu Leu Phe Leu Pro Pro Ala Leu
85 90 95
Cys Asp Met Thr Gly Thr Ser Leu Met Tyr Val Ala Leu Asn Met Thr
100 105 110
Ser Ala Ser Ser Phe Gln Met Leu Arg Gly Ala Val Ile Ile Phe Thr
115 120 125
Gly Leu Phe Ser Val Ala Phe Leu Gly Arg Arg Leu Val Leu Ser Gln
130 135 140
Trp Leu Gly Ile Leu Ala Thr Ile Ala Gly Leu Val Val Val Gly Leu

```

145					150					155				160
Ala	Asp	Leu	Leu	Ser	Lys	His	Asp	Ser	Gln	His	Lys	Leu	Ser	Glu Val
				165					170					175
Ile	Thr	Gly	Asp	Leu	Leu	Ile	Ile	Met	Ala	Gln	Ile	Ile	Val	Ala Ile
			180					185					190	
Gln	Met	Val	Leu	Glu	Glu	Lys	Phe	Val	Tyr	Lys	His	Asn	Val	His Pro
		195					200					205		
Leu	Arg	Ala	Val	Gly	Thr	Glu	Gly	Leu	Phe	Gly	Phe	Val	Ile	Leu Ser
	210					215					220			
Leu	Leu	Leu	Val	Pro	Met	Tyr	Tyr	Ile	Pro	Ala	Gly	Ser	Phe	Ser Gly
225					230					235				240
Asn	Pro	Arg	Gly	Thr	Leu	Glu	Asp	Ala	Leu	Asp	Ala	Phe	Cys	Gln Val
			245					250					255	
Gly	Gln	Gln	Pro	Leu	Ile	Ala	Val	Ala	Leu	Leu	Gly	Asn	Ile	Ser Ser
			260					265					270	
Ile	Ala	Phe	Phe	Asn	Phe	Ala	Gly	Ile	Ser	Val	Thr	Lys	Glu	Leu Ser
	275						280					285		
Ala	Thr	Thr	Arg	Met	Val	Leu	Asp	Ser	Leu	Arg	Thr	Val	Val	Ile Trp
	290					295					300			
Ala	Leu	Ser	Leu	Ala	Leu	Gly	Trp	Glu	Ala	Phe	His	Ala	Leu	Gln Ile
305					310					315				320
Leu	Gly	Phe	Leu	Ile	Leu	Leu	Ile	Gly	Thr	Ala	Leu	Tyr	Asn	Gly Leu
			325					330						335
His	Arg	Pro	Leu	Leu	Gly	Arg	Leu	Ser	Arg	Gly	Arg	Pro	Leu	Ala Glu
			340					345					350	
Glu	Ser	Glu	Gln	Glu	Arg	Leu	Leu	Gly	Gly	Thr	Arg	Thr	Pro	Ile Asn
	355						360					365		
Asp	Ala	Ser												
	370													

<210> 282
 <211> 18
 <212> PRT
 <213> Homo sapiens

<400> 282
 Met Ala Trp Thr Lys Tyr Gln Leu Phe Leu Ala Gly Leu Met Leu Val
 1 5 10 15
 Thr Gly

<210> 283
 <211> 353
 <212> PRT
 <213> Homo sapiens

<400> 283
 Ser Ile Asn Thr Leu Ser Ala Lys Trp Ala Asp Asn Phe Met Ala Glu
 1 5 10 15
 Gly Cys Gly Gly Ser Lys Glu His Ser Phe Gln His Pro Phe Leu Gln
 20 25 30
 Ala Val Gly Met Phe Leu Gly Glu Phe Ser Cys Leu Ala Ala Phe Tyr
 35 40 45
 Leu Leu Arg Cys Arg Ala Ala Gly Gln Ser Asp Ser Ser Val Asp Pro
 50 55 60

Gln	Gln	Pro	Phe	Asn	Pro	Leu	Leu	Phe	Leu	Pro	Pro	Ala	Leu	Cys	Asp
65				70					75					80	
Met	Thr	Gly	Thr	Ser	Leu	Met	Tyr	Val	Ala	Leu	Asn	Met	Thr	Ser	Ala
				85					90					95	
Ser	Ser	Phe	Gln	Met	Leu	Arg	Gly	Ala	Val	Ile	Ile	Phe	Thr	Gly	Leu
			100					105					110		
Phe	Ser	Val	Ala	Phe	Leu	Gly	Arg	Arg	Leu	Val	Leu	Ser	Gln	Trp	Leu
		115					120					125			
Gly	Ile	Leu	Ala	Thr	Ile	Ala	Gly	Leu	Val	Val	Val	Gly	Leu	Ala	Asp
	130					135					140				
Leu	Leu	Ser	Lys	His	Asp	Ser	Gln	His	Lys	Leu	Ser	Glu	Val	Ile	Thr
145				150					155					160	
Gly	Asp	Leu	Leu	Ile	Ile	Met	Ala	Gln	Ile	Ile	Val	Ala	Ile	Gln	Met
			165					170						175	
Val	Leu	Glu	Glu	Lys	Phe	Val	Tyr	Lys	His	Asn	Val	His	Pro	Leu	Arg
			180					185					190		
Ala	Val	Gly	Thr	Glu	Gly	Leu	Phe	Gly	Phe	Val	Ile	Leu	Ser	Leu	Leu
		195					200					205			
Leu	Val	Pro	Met	Tyr	Tyr	Ile	Pro	Ala	Gly	Ser	Phe	Ser	Gly	Asn	Pro
	210					215					220				
Arg	Gly	Thr	Leu	Glu	Asp	Ala	Leu	Asp	Ala	Phe	Cys	Gln	Val	Gly	Gln
225				230						235				240	
Gln	Pro	Leu	Ile	Ala	Val	Ala	Leu	Leu	Gly	Asn	Ile	Ser	Ser	Ile	Ala
			245						250					255	
Phe	Phe	Asn	Phe	Ala	Gly	Ile	Ser	Val	Thr	Lys	Glu	Leu	Ser	Ala	Thr
		260						265					270		
Thr	Arg	Met	Val	Leu	Asp	Ser	Leu	Arg	Thr	Val	Val	Ile	Trp	Ala	Leu
	275						280					285			
Ser	Leu	Ala	Leu	Gly	Trp	Glu	Ala	Phe	His	Ala	Leu	Gln	Ile	Leu	Gly
	290					295					300				
Phe	Leu	Ile	Leu	Leu	Ile	Gly	Thr	Ala	Leu	Tyr	Asn	Gly	Leu	His	Arg
305				310						315				320	
Pro	Leu	Leu	Gly	Arg	Leu	Ser	Arg	Gly	Arg	Pro	Leu	Ala	Glu	Glu	Ser
			325					330					335		
Glu	Gln	Glu	Arg	Leu	Leu	Gly	Gly	Thr	Arg	Thr	Pro	Ile	Asn	Asp	Ala
			340					345					350		

Ser

<210> 284
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 284
 Ser Ile Asn Thr Leu Ser Ala Lys Trp Ala Asp Asn Phe Met Ala Glu
 1 5 10 15
 Gly Cys Gly Gly Ser Lys Glu His Ser Phe Gln His Pro
 20 25

<210> 285
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 285

Asn Met Thr Ser Ala Ser Ser Phe Gln

1

5

<210> 286

<211> 14

<212> PRT

<213> Homo sapiens

<400> 286

Asp Leu Leu Ser Lys His Asp Ser Gln His Lys Leu Ser Glu

1

5

10

<210> 287

<211> 27

<212> PRT

<213> Homo sapiens

<400> 287

Pro Ala Gly Ser Phe Ser Gly Asn Pro Arg Gly Thr Leu Glu Asp Ala

1

5

10

15

Leu Asp Ala Phe Cys Gln Val Gly Gln Gln Pro

20

25

<210> 288

<211> 7

<212> PRT

<213> Homo sapiens

<400> 288

Glu Ala Phe His Ala Leu Gln

1

5

<210> 289

<211> 21

<212> PRT

<213> Homo sapiens

<400> 289

Phe Leu Gln Ala Val Gly Met Phe Leu Gly Glu Phe Ser Cys Leu Ala

1

5

10

15

Ala Phe Tyr Leu Leu

20

<210> 290

<211> 21

<212> PRT

<213> Homo sapiens

<400> 290

Leu Leu Phe Leu Pro Pro Ala Leu Cys Asp Met Thr Gly Thr Ser Leu

1

5

10

15

Met Tyr Val Ala Leu
20

<210> 291
<211> 19
<212> PRT
<213> Homo sapiens

<400> 291
Met Leu Arg Gly Ala Val Ile Ile Phe Thr Gly Leu Phe Ser Val Ala
1 5 10 15
Phe Leu Gly

<210> 292
<211> 17
<212> PRT
<213> Homo sapiens

<400> 292
Trp Leu Gly Ile Leu Ala Thr Ile Ala Gly Leu Val Val Val Gly Leu
1 5 10 15
Ala

<210> 293
<211> 17
<212> PRT
<213> Homo sapiens

<400> 293
Val Ile Thr Gly Asp Leu Leu Ile Ile Met Ala Gln Ile Ile Val Ala
1 5 10 15
Ile

<210> 294
<211> 18
<212> PRT
<213> Homo sapiens

<400> 294
Gly Leu Phe Gly Phe Val Ile Leu Ser Leu Leu Leu Val Pro Met Tyr
1 5 10 15
Tyr Ile

<210> 295
<211> 23
<212> PRT
<213> Homo sapiens

<400> 295
 Leu Ile Ala Val Ala Leu Leu Gly Asn Ile Ser Ser Ile Ala Phe Phe
 1 5 10 15
 Asn Phe Ala Gly Ile Ser Val
 20

<210> 296
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 296
 Met Val Leu Asp Ser Leu Arg Thr Val Val Ile Trp Ala Leu Ser Leu
 1 5 10 15
 Ala Leu Gly Trp
 20

<210> 297
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 297
 Ile Leu Gly Phe Leu Ile Leu Leu Ile Gly Thr Ala Leu Tyr Asn Gly
 1 5 10 15
 Leu

<210> 298
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 298
 Arg Cys Arg Ala Ala Gly Gln Ser Asp Ser Ser Val Asp Pro Gln Gln
 1 5 10 15
 Pro Phe Asn Pro
 20

<210> 299
 <211> 7
 <212> PRT
 <213> Homo sapiens

<400> 299
 Arg Arg Leu Val Leu Ser Gln
 1 5

<210> 300
 <211> 23
 <212> PRT

<213> Homo sapiens

<400> 300

Gln Met Val Leu Glu Glu Lys Phe Val Tyr Lys His Asn Val His Pro
1 5 10 15
Leu Arg Ala Val Gly Thr Glu
20

<210> 301

<211> 9

<212> PRT

<213> Homo sapiens

<400> 301

Thr Lys Glu Leu Ser Ala Thr Thr Arg
1 5

<210> 302

<211> 35

<212> PRT

<213> Homo sapiens

<400> 302

His Arg Pro Leu Leu Gly Arg Leu Ser Arg Gly Arg Pro Leu Ala Glu
1 5 10 15
Glu Ser Glu Gln Glu Arg Leu Leu Gly Gly Thr Arg Thr Pro Ile Asn
20 25 30
Asp Ala Ser
35

<210> 303

<211> 2811

<212> DNA

<213> Homo sapiens

<400> 303

gtcgaccac gcgtccgcgg gacagctggc ctgaagctca gagccggggc gtgcgccatg 60
gccccacact gggctgtctg gctgctggca gcaaggctgt ggggcctggg cattggggct 120
gaggtgtggt ggaaccttgt gccgcgtaag acagtgtctt ctggggagct ggccacggta 180
gtacggcggg tctcccagac cggcatccag gacttcctga cactgacgct gacggagccc 240
actgggcttc tgtacgtggg cgcccgagag gccctgtttg ccttcagcat ggaggccctg 300
gagctgcaag gagegatctc ctgggaggcc cccgtggaga agaagactga gtgtatccag 360
aaagggaaga acaaccagac cgagtgcctc aacttcattc gcttcctgca gccctacaat 420
gcctcccacc tgtacgtctg tggcacctac gccttcacgc ccaagtgcac ctacgtcgtg 480
agtgtgccc tctacctcgt gtgtccccag cccccgcgcc tctcaccct tctctggact 540
cgtggatgtg gccacagag ccctgccctt aagcatctcc tcatcacctc tctctctgtc 600
cttagaacat gctcaccttc actttggagc atggagagtt tgaagatggg aagggaagt 660
gtccctatga ccagctaaag ggccatgctg gccttcctgt ggatggtgag ctgtactcgg 720
ccacactcaa caacttcctg ggcacggaac ccattatcct gcgtaacatg gggccccacc 780
actccatgaa gacagagtac ctggcctttt ggctcaacga acctcacttt gtaggctctg 840
cctatgtacc tgagagtgtg ggcagcttca cgggggacga cgacaaggtc tacttcttct 900
tcagggagcg ggcagtggag tccgactgct atgccagaca ggtgggtggc cgtgtggccc 960
gtgtctgcaa gggcgatatg gggggcgcac ggaccctgca gaggaagtgg accacgttcc 1020
tgaaggcgcg gctggcatgc tctgccccga actggcagct ctacttcaac cagctgcagg 1080

cgatgcacac	cctgcaggac	acctcctggc	acaacaccac	cttctttggg	gtttttcaag	1140
cacagtgggg	tgacatgtac	ctgtcggcca	tctgtgagta	ccagttggaa	gagatccagc	1200
gggtgtttga	gggcccctat	aaggagtacc	atgaggaagc	ccagaagtgg	gaccgctaca	1260
ctgaccctgt	acccaggccc	tggttgtgat	ggctgcccag	ccccgccatg	ccggggccta	1320
ccactgcttt	tcagaggagc	agggggcgcg	gctggctgct	gaaggctacc	ttgtggctgt	1380
cgtggcaggc	ccgtcgggtga	ccttgagggc	ccggggcccc	ctggaaaacc	tggggctggt	1440
gtggctggcg	gtgggtggccc	tgggggctgt	gtgcctgggtg	ctgctgctgc	tgggtgctgtc	1500
attgcgccgg	cggctgcggg	aagagctgga	gaaaggggccc	aaggctactg	agaggacctt	1560
ggtgtacccc	ctggagctgc	ccaaggagcc	caccagtccc	cccttcgggc	cctgtcctga	1620
accagatgag	aaactttggg	atcctgtcgg	ttactactat	tcagatggct	cccttaagat	1680
agtacctggg	catgcccggg	gccagcccgg	tggggggccc	ccttcgccac	ctccaggcat	1740
cccaggccag	cctctgcctt	ctccaactcg	gcttcacctg	gggggtgggc	ggaactcaaa	1800
tgccaatggt	tacgtgcgct	tacaactagg	aggggaggac	cggggaggggc	tcgggcaccc	1860
cctgcctgag	ctcgcggatg	aactgagacg	caaactgcag	caacgccagc	cactgcccga	1920
ctccaacccc	gaggagtcac	cagtatgagg	ggaaccccca	ccgcgtcggc	gggaagcggtg	1980
ggaggtgtag	ctcctacttt	tgcacaggca	ccagctacct	cagggacatg	gcacgggcac	2040
ctgctctgtc	tgggacagat	actgcccagc	accacccggg	ccatgaggac	ctgctctgct	2100
cagcacgggg	actgccactt	ggtgtggctc	accagggcac	cagcctcgca	gaaggcatct	2160
tcctcctctc	tgtgaatcac	agacacgcgg	gaccccagcc	gccaaaactt	ttcaaggcag	2220
aagtttcaag	atgtgtgttt	gtctgtattt	gcacatgtgt	ttgtgtgtgt	gtgtatgtgt	2280
gtgtgcacgc	gcgtgcgcgc	ttgtggcata	gccttcctgt	ttctgtcaag	tcttcccttg	2340
gcctgggtcc	tcctggtgag	tcattggagc	tatgaagggg	aaggggtcgt	atcactttgt	2400
ctctcttacc	cccactgccc	cgagtgtcgg	gcagcgtatg	acatatggag	gtgggggtgga	2460
cagggtgctg	tgccccttca	gagggtggg	agggcctggg	gtgggcctag	tcctgtctct	2520
agggctgtga	atgttttcag	ggtgggggga	gggagatgga	gcctcctgtg	tgtttggggg	2580
gaaggggtggg	tggggcctcc	cacttgggccc	cgggggttcag	tggatatttta	tacttgccct	2640
cttctgttac	agggctggga	aaggctgtgt	gaggggagag	aagggagagg	gtgggcctgc	2700
tgtggacaat	ggcatactct	cttcagccc	taggaggagg	gctcctaaca	gtgtaactta	2760
ttgtgtcccc	gcgtatttat	ttgttgtaaa	tatttgagat	ttttatattg	a	2811

<210> 304
 <211> 729
 <212> DNA
 <213> Homo sapiens

<400> 304						
atggccccac	actgggctgt	ctggctgctg	gcagcaaggc	tgtggggcct	gggcattggg	60
gctgaggtgt	ggtggaacct	tgtgccgcgt	aagacagtgt	cttctgggga	gctggccacg	120
gtagtacggc	ggttctccca	gaccggcatc	caggacttcc	tgacactgac	gctgacggag	180
cccactgggc	ttctgtacgt	gggcgcccga	gaggccctgt	ttgccttcag	catggaggcc	240
ctggagctgc	aaggagcgat	ctcctgggag	gccccctgg	agaagaagac	tgagtgtatc	300
cagaaagggg	agaacaacca	gaccgagtgc	ttcaacttca	tccgcttcct	gcagccctac	360
aatgcctccc	acctgtacgt	ctgtggcacc	tacgccttcc	agcccaagtg	cacctacgtc	420
gtgagtgtctg	ccctcctacc	tcggtgtccc	cagccccccg	ccctcctcac	ccttctcttg	480
actcgtggat	gtggcccaca	gagccctgcc	cttaagcatc	tcctcatcac	ctctctctct	540
gtccttagaa	catgctcacc	ttcactttgg	agcatggaga	gtttgaagat	gggaagggca	600
agtgtcccta	tgaccagct	aagggccatg	ctggccttct	tgtggatggg	gagctgtact	660
cggccacact	caacaacttc	ctgggcacgg	aaccattat	cctgcgtaac	atggggcccc	720
accactcca						729

<210> 305
 <211> 243
 <212> PRT
 <213> Homo sapiens

<400> 305
 Met Ala Pro His Trp Ala Val Trp Leu Leu Ala Ala Arg Leu Trp Gly

1				5				10				15				
Leu	Gly	Ile	Gly	Ala	Glu	Val	Trp	Trp	Asn	Leu	Val	Pro	Arg	Lys	Thr	
			20					25					30			
Val	Ser	Ser	Gly	Glu	Leu	Ala	Thr	Val	Val	Arg	Arg	Phe	Ser	Gln	Thr	
		35					40					45				
Gly	Ile	Gln	Asp	Phe	Leu	Thr	Leu	Thr	Leu	Thr	Glu	Pro	Thr	Gly	Leu	
	50					55					60					
Leu	Tyr	Val	Gly	Ala	Arg	Glu	Ala	Leu	Phe	Ala	Phe	Ser	Met	Glu	Ala	
65					70					75					80	
Leu	Glu	Leu	Gln	Gly	Ala	Ile	Ser	Trp	Glu	Ala	Pro	Val	Glu	Lys	Lys	
			85						90					95		
Thr	Glu	Cys	Ile	Gln	Lys	Gly	Lys	Asn	Asn	Gln	Thr	Glu	Cys	Phe	Asn	
			100					105						110		
Phe	Ile	Arg	Phe	Leu	Gln	Pro	Tyr	Asn	Ala	Ser	His	Leu	Tyr	Val	Cys	
		115					120						125			
Gly	Thr	Tyr	Ala	Phe	Gln	Pro	Lys	Cys	Thr	Tyr	Val	Val	Ser	Ala	Ala	
	130					135					140					
Leu	Leu	Pro	Arg	Cys	Pro	Gln	Pro	Pro	Ala	Leu	Leu	Thr	Leu	Leu	Trp	
145					150					155					160	
Thr	Arg	Gly	Cys	Gly	Pro	Gln	Ser	Pro	Ala	Leu	Lys	His	Leu	Leu	Ile	
			165						170					175		
Thr	Ser	Leu	Ser	Val	Leu	Arg	Thr	Cys	Ser	Pro	Ser	Leu	Trp	Ser	Met	
			180					185					190			
Glu	Ser	Leu	Lys	Met	Gly	Arg	Ala	Ser	Val	Pro	Met	Thr	Gln	Leu	Arg	
	195						200					205				
Ala	Met	Leu	Ala	Phe	Leu	Trp	Met	Val	Ser	Cys	Thr	Arg	Pro	His	Ser	
	210					215					220					
Thr	Thr	Ser	Trp	Ala	Arg	Asn	Pro	Leu	Ser	Cys	Val	Thr	Trp	Gly	Pro	
225					230					235					240	
Thr	Thr	Pro														

<210> 306
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 306
 Met Ala Pro His Trp Ala Val Trp Leu Leu Ala Ala Arg Leu Trp Gly
 1 5 10 15
 Leu Gly Ile Gly
 20

<210> 307
 <211> 223
 <212> PRT
 <213> Homo sapiens

<400> 307
 Ala Glu Val Trp Trp Asn Leu Val Pro Arg Lys Thr Val Ser Ser Gly
 1 5 10 15
 Glu Leu Ala Thr Val Val Arg Arg Phe Ser Gln Thr Gly Ile Gln Asp
 20 25 30
 Phe Leu Thr Leu Thr Leu Thr Glu Pro Thr Gly Leu Leu Tyr Val Gly
 35 40 45

Ala	Arg	Glu	Ala	Leu	Phe	Ala	Phe	Ser	Met	Glu	Ala	Leu	Glu	Leu	Gln
50						55				60					
Gly	Ala	Ile	Ser	Trp	Glu	Ala	Pro	Val	Glu	Lys	Lys	Thr	Glu	Cys	Ile
65					70				75						80
Gln	Lys	Gly	Lys	Asn	Asn	Gln	Thr	Glu	Cys	Phe	Asn	Phe	Ile	Arg	Phe
				85				90						95	
Leu	Gln	Pro	Tyr	Asn	Ala	Ser	His	Leu	Tyr	Val	Cys	Gly	Thr	Tyr	Ala
		100					105						110		
Phe	Gln	Pro	Lys	Cys	Thr	Tyr	Val	Val	Ser	Ala	Ala	Leu	Leu	Pro	Arg
		115					120					125			
Cys	Pro	Gln	Pro	Pro	Ala	Leu	Leu	Thr	Leu	Leu	Trp	Thr	Arg	Gly	Cys
130					135						140				
Gly	Pro	Gln	Ser	Pro	Ala	Leu	Lys	His	Leu	Leu	Ile	Thr	Ser	Leu	Ser
145					150				155						160
Val	Leu	Arg	Thr	Cys	Ser	Pro	Ser	Leu	Trp	Ser	Met	Glu	Ser	Leu	Lys
				165				170						175	
Met	Gly	Arg	Ala	Ser	Val	Pro	Met	Thr	Gln	Leu	Arg	Ala	Met	Leu	Ala
			180				185						190		
Phe	Leu	Trp	Met	Val	Ser	Cys	Thr	Arg	Pro	His	Ser	Thr	Thr	Ser	Trp
		195					200					205			
Ala	Arg	Asn	Pro	Leu	Ser	Cys	Val	Thr	Trp	Gly	Pro	Thr	Thr	Pro	
210						215					220				

<210> 308
 <211> 2498
 <212> DNA
 <213> Homo sapiens

<400> 308

gtcgaccac	gcgtccgcgg	acgcgtgggc	gcgcgggggc	catccagacc	ctgcggagag	60
cgaggcccg	agcgtcgccg	aggtttgagg	gcgcgggaga	ccgagggcct	ggcggccgaa	120
ggaaccgcc	caagaagagc	ctctggcccc	ggggctgctg	gaacatgtgc	ggggggacac	180
agtttgtttg	acagttgcc	gactatgttt	acgcttctgg	ttctactcag	ccaactgccc	240
acagttacc	tggggtttcc	tcattgcgca	agaggtccaa	aggcttctaa	gcatgcggga	300
gaagaagtgt	ttacatcaaa	agaagaagca	aactttttca	tacatagacg	ccttctgtat	360
aatagatttg	atctggagct	cttactccc	ggcaacctag	aaagagagtg	caatgaagaa	420
ctttgcaatt	atgaggaagc	cagagagatt	tttgtggatg	aagataaaac	gattgcattt	480
tggcaggaat	attcagctaa	aggaccaacc	acaaaatcag	atggcaacag	agagaaaata	540
gatgttatgg	gccttctgac	tggattaatt	gctgctggag	tatttttggg	tatttttggg	600
ttacttggct	actatctttg	tatcactaag	tgtaataggc	tacaacatcc	atgctcttca	660
gccgtctatg	aaagggggag	gcacactccc	tccatcattt	tcagaagacc	tgaggaggct	720
gccttgtctc	cattgccgcc	ttctgtggag	gatgcaggat	taccttctta	tgaacaggca	780
gtggcgctga	ccagaaaaca	cagtgtttca	ccaccaccac	catatcctgg	gcacacaaaa	840
ggatttaggg	tatttaaaaa	atctatgtct	ctcccatctc	actgactacc	ttgtcatttt	900
ggtataagaa	atttgtgtta	tttgataggc	cgggcatggt	ggctcatgcc	tgtaatccca	960
gcactttggg	aggccaggag	ttcgagacca	gcctggccaa	catggtgaaa	cccgttctct	1020
actaaaaatt	caaaaattac	ctaggcgtca	tggggcatgc	ctgtagtccc	acctacttgg	1080
gagctgaag	caggagaatt	gctcgaacct	gggaggcaga	ggttgacagta	agctgagatc	1140
acgccactgc	attccagcct	ggcgacaga	gcaagactcc	atctcaaaaa	taaaataaaa	1200
aaagaaagaa	agaaaagaag	aagaaaagag	aagaaggaga	aggagatgaa	ggaggaggag	1260
gaggagaagg	agaagaagaa	gaagaagaag	accacaaaag	acatgactat	ccaacttttt	1320
atgacaaact	gcaaggaata	aaggaagaat	aagtccatgt	actgtaccac	agaagttctg	1380
tctgcatctt	ggacctgaac	ttgatcatta	tcagcttgat	aagagacttt	ttgactctat	1440
atccttgcag	ttaagaagaa	agcacttttt	tgtaatgttt	gttttaaatgg	ttcaaaaaaa	1500
atctttctta	taaagagcat	aggtagaatt	agtgaactct	ttggatcctt	tgtacagata	1560
aaggttatag	atttcttgtg	ttgaatatta	aaaaagcaag	gatgtctaac	cattaagatt	1620

```

atccaaagtc aggctgggcg cagtgggtca cgctgtaat cccagcactt tgggagggat 1680
aggtgggcg atcacctgag gtcaggagtt tgagaccagc ctggccaaca tggcaaaacc 1740
ccgtctctac aaaaatacaa aagaaattag ccagacatga tggcggggtgc ctctaattccc 1800
agctactggg gaggctgagg tgggagaatc gcttgaactc gggaggtgga ggttgtagtg 1860
aggcgagatt gtgccattgc actccaacct gggcgacaga gtgagactcc atctcaaaaa 1920
aaaaaaaaa aaaaagatta tccaaaaaga tattggacct actctttctt aggatttttt 1980
tggcgggggg ttagaaatac ttcacagaat ttgacatttc agtataaatc tgtgacctta 2040
atataatcac ttggttttat atgttaaatt attgcacagc agtcatcata ttttgcagag 2100
tttagttctt aactcttgct gtcagtcattg ttttattata ggtagtgggg tcagtagttt 2160
tcttcttcta aaaaatacta tttgctatga agttagttct tcagaagata caagtttgca 2220
atgaaaagga tttgcaaggg ttgttatgct atcaaataaa cagacctaaa atctaggaga 2280
cactagaact taatgaagtt gccctgtta ctgattagta aatactccca tcttcgttgc 2340
aaaattatct ctctgtataa ctacatatga ttattttgaa atttggttaa cttcataagt 2400
aatagtttga gaatgtggaa aaagtaattt gcttttctgc tcttaaaata atattgatta 2460
atgttaccag aaaaaaaaaa aaaaaaaagg gcggccgc 2498

```

<210> 309
 <211> 678
 <212> DNA
 <213> Homo sapiens

```

<400> 309
atgtttacgc ttctggttct actcagccaa ctgcccacag ttaccctggg gtttcctcat 60
tgcgcaagag gtccaaaggc ttctaagcat gcgggagaag aagtgtttac atcaaaagaa 120
gaagcaaact ttttcataca tagacgcctt ctgtataata gatttgatct ggagctcttc 180
actcccggca acctagaaag agagtgcatt gaagaacttt gcaattatga ggaagccaga 240
gagatttttg tggatgaaga taaaacgatt gcattttggc aggaatattc agctaaagga 300
ccaaccacaa aatcagatgg caacagagag aaaatagatg ttatgggcct tctgactgga 360
ttaattgctg ctggagtatt tttggttatt tttggattac ttggctacta tctttgtatc 420
actaagtgtg ataggctaca acatccatgc tcttcagccg tctatgaaag ggggaggcac 480
actccctcca tcattttcag aagacctgag gaggtgcct tgtctccatt gccgccttct 540
gtggaggatg caggattacc ttcttatgaa caggcagtgg cgctgaccag aaaacacagt 600
gtttcaccac caccaccata tcctgggcac acaaaaggat ttaggggtatt taaaaaatct 660
atgtctctcc catctcac 678

```

<210> 310
 <211> 226
 <212> PRT
 <213> Homo sapiens

```

<400> 310
Met Phe Thr Leu Leu Val Leu Leu Ser Gln Leu Pro Thr Val Thr Leu
 1           5           10           15
Gly Phe Pro His Cys Ala Arg Gly Pro Lys Ala Ser Lys His Ala Gly
 20           25           30
Glu Glu Val Phe Thr Ser Lys Glu Glu Ala Asn Phe Phe Ile His Arg
 35           40           45
Arg Leu Leu Tyr Asn Arg Phe Asp Leu Glu Leu Phe Thr Pro Gly Asn
 50           55           60
Leu Glu Arg Glu Cys Asn Glu Glu Leu Cys Asn Tyr Glu Glu Ala Arg
 65           70           75           80
Glu Ile Phe Val Asp Glu Asp Lys Thr Ile Ala Phe Trp Gln Glu Tyr
 85           90           95
Ser Ala Lys Gly Pro Thr Thr Lys Ser Asp Gly Asn Arg Glu Lys Ile
100          105          110
Asp Val Met Gly Leu Leu Thr Gly Leu Ile Ala Ala Gly Val Phe Leu
115          120          125

```

Val	Ile	Phe	Gly	Leu	Leu	Gly	Tyr	Tyr	Leu	Cys	Ile	Thr	Lys	Cys	Asn
130						135					140				
Arg	Leu	Gln	His	Pro	Cys	Ser	Ser	Ala	Val	Tyr	Glu	Arg	Gly	Arg	His
145					150					155					160
Thr	Pro	Ser	Ile	Ile	Phe	Arg	Arg	Pro	Glu	Glu	Ala	Ala	Leu	Ser	Pro
				165					170					175	
Leu	Pro	Pro	Ser	Val	Glu	Asp	Ala	Gly	Leu	Pro	Ser	Tyr	Glu	Gln	Ala
			180					185					190		
Val	Ala	Leu	Thr	Arg	Lys	His	Ser	Val	Ser	Pro	Pro	Pro	Pro	Tyr	Pro
	195						200					205			
Gly	His	Thr	Lys	Gly	Phe	Arg	Val	Phe	Lys	Lys	Ser	Met	Ser	Leu	Pro
210						215					220				
Ser	His														
225															

<210> 311
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 311
 Met Phe Thr Leu Leu Val Leu Leu Ser Gln Leu Pro Thr Val Thr Leu
 1 5 10 15
 Gly

<210> 312
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 312
 Phe Pro His Cys Ala Arg Gly Pro Lys Ala Ser Lys His Ala Gly Glu
 1 5 10 15
 Glu Val Phe Thr Ser Lys Glu Glu Ala Asn Phe Phe Ile His Arg Arg
 20 25 30
 Leu Leu Tyr Asn Arg Phe Asp Leu Glu Leu Phe Thr Pro Gly Asn Leu
 35 40 45
 Glu Arg Glu Cys Asn Glu Glu Leu Cys Asn Tyr Glu Glu Ala Arg Glu
 50 55 60
 Ile Phe Val Asp Glu Asp Lys Thr Ile Ala Phe Trp Gln Glu Tyr Ser
 65 70 75 80
 Ala Lys Gly Pro Thr Thr Lys Ser Asp Gly Asn Arg Glu Lys Ile Asp
 85 90 95
 Val Met Gly Leu Leu Thr Gly Leu Ile Ala Ala Gly Val Phe Leu Val
 100 105 110
 Ile Phe Gly Leu Leu Gly Tyr Tyr Leu Cys Ile Thr Lys Cys Asn Arg
 115 120 125
 Leu Gln His Pro Cys Ser Ser Ala Val Tyr Glu Arg Gly Arg His Thr
 130 135 140
 Pro Ser Ile Ile Phe Arg Arg Pro Glu Glu Ala Ala Leu Ser Pro Leu
 145 150 155 160
 Pro Pro Ser Val Glu Asp Ala Gly Leu Pro Ser Tyr Glu Gln Ala Val
 165 170 175
 Ala Leu Thr Arg Lys His Ser Val Ser Pro Pro Pro Tyr Pro Gly

			180					185					190			
His	Thr	Lys	Gly	Phe	Arg	Val	Phe	Lys	Lys	Ser	Met	Ser	Leu	Pro	Ser	
		195					200					205				
His																

<210> 313
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 313
 Phe Pro His Cys Ala Arg Gly Pro Lys Ala Ser Lys His Ala Gly Glu
 1 5 10 15
 Glu Val Phe Thr Ser Lys Glu Glu Ala Asn Phe Phe Ile His Arg Arg
 20 25 30
 Leu Leu Tyr Asn Arg Phe Asp Leu Glu Leu Phe Thr Pro Gly Asn Leu
 35 40 45
 Glu Arg Glu Cys Asn Glu Glu Leu Cys Asn Tyr Glu Glu Ala Arg Glu
 50 55 60
 Ile Phe Val Asp Glu Asp Lys Thr Ile Ala Phe Trp Gln Glu Tyr Ser
 65 70 75 80
 Ala Lys Gly Pro Thr Thr Lys Ser Asp Gly Asn Arg Glu Lys Ile Asp
 85 90 95

<210> 314
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 314
 Val Met Gly Leu Leu Thr Gly Leu Ile Ala Ala Gly Val Phe Leu Val
 1 5 10 15
 Ile Phe Gly Leu Leu Gly Tyr Tyr Leu
 20 25

<210> 315
 <211> 88
 <212> PRT
 <213> Homo sapiens

<400> 315
 Cys Ile Thr Lys Cys Asn Arg Leu Gln His Pro Cys Ser Ser Ala Val
 1 5 10 15
 Tyr Glu Arg Gly Arg His Thr Pro Ser Ile Ile Phe Arg Arg Pro Glu
 20 25 30
 Glu Ala Ala Leu Ser Pro Leu Pro Pro Ser Val Glu Asp Ala Gly Leu
 35 40 45
 Pro Ser Tyr Glu Gln Ala Val Ala Leu Thr Arg Lys His Ser Val Ser
 50 55 60
 Pro Pro Pro Pro Tyr Pro Gly His Thr Lys Gly Phe Arg Val Phe Lys
 65 70 75 80
 Lys Ser Met Ser Leu Pro Ser His
 85

<210> 316
<220>
<223> Unknown
<400> 316
000
<210> 317
<220>
<223> Unknown
<400> 317
000
<210> 318
<220>
<223> Unknown
<400> 318
000
<210> 319
<220>
<223> Unknown
<400> 319
000
<210> 320
<220>
<223> Unknown
<400> 320
000
<210> 321
<220>
<223> Unknown
<400> 321
000
<210> 322
<220>
<223> Unknown
<400> 322
000

<210> 323
 <220>
 <223> Unknown

<400> 323
 000

<210> 324
 <211> 1432
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)...(1432)
 <223> n = A,T,C or G

<400> 324
 acgcgtccgc acanggccgg cgcggtctggg agcgggtggg cggccgggag gccggagcag 60
 cacggccgca ggacctggag ctccggctgc gtcttcccgc agcgtacctc gccatgcgcc 120
 tgccgcgccc ggccgcgctg gggctcctgc cgcttctgct gctgctgccg cccgcgcccg 180
 aggccgccaa gaagccgacg ccctgccacc ggtgccgggg gctgggtggac aagtttaacc 240
 aggggatggg ggacaccgca aagaagaact ttggcggcgg gaacacggct tgggaggaaa 300
 agacgtctgt caagtacgag tccagcgaga ttgcctctgt ggagatcctg gaggggctgt 360
 gcgagagcag cgacttcgaa tgcaatcaga tgctagaggc gcaggaggag cacctggagg 420
 cctgggtggc gcagctgaag agcgaatatc ctgacttatt cgagtgggtt tgtgtgaaga 480
 cactgaaagt gtgctgctct ccaggaacct acgggtcccg ctgtctcgca tgccagggcg 540
 gatcccagag gccctgcagc gggaatggcc actgcagcgg agatgggagc agacagggcg 600
 acgggtcctg ccggtgccac atgggggtacc agggcccgcg gtgcaactgac tgcattggac 660
 gctacttcag ctgcctccgg aacgagacct acagcatctg cacagcctgt gacgagtcct 720
 gcaagacgtg ctcgggcctg accaacagag actgcggcga gtgtgaagtg ggctgggtgc 780
 tggacgaggg cgctgtgtg gatgtggacg agtgtgcggc cgagccgcct ccctgcagcg 840
 ctgctcagtt ctgtaagaac gccaacggct cctacacgtg cgaagagtgt gactccagct 900
 gtgtgggctg cacaggggaa ggcccaggaa actgtaaaga gtgtatctct ggctacgcga 960
 gggagcacgg acagtgtgca gatgtggacg agtgtcact agcagaaaaa acctgtgtga 1020
 ggaaaaacga aaactgctac aatactccag ggagctacgt ctgtgtgtgt cctgacggct 1080
 tcgaagaaac ggaagatgcc tgtgtgccgc cggcagaggc tgaagccaca gaaggagaaa 1140
 gcccagacac gctgccctcc cgcaagacc tgtaattgtc cggacttacc ctttaaatta 1200
 ttcagaagga tgtcccgtgg aaaatgtggc cctgaggatg ccgtctcctg cagtggacag 1260
 cggcggggag aggctgcctg ctctctaacg gttgattctc atttgtccct taaacagctg 1320
 catttcttgg ttgttcttaa acagacttgt atattttgat acagttcttt gtaataaaat 1380
 tgaccattgt aggtaatcaa aaaaaaaaaa aaaaaaggg cggccgctag ac 1432

<210> 325
 <211> 1059
 <212> DNA
 <213> Homo sapiens

<400> 325
 atgcgcctgc cgcgccgggc cgcgctgggg ctcttgccgc ttctgctgct gctgccgccc 60
 gcgccggagg ccgccaagaa gccgacgcc tgccaccggt gccgggggct ggtggacaag 120
 tttaaccagg ggatggtgga caccgcaaag aagaactttg gcggcgggaa cacggcttgg 180
 gaggaaaaga cgctgtccaa gtacgagtc agcgagattc gcctgctgga gatcctggag 240
 gggctgtgcg agagcagcga cttcgaatgc aatcagatgc tagaggcgca ggaggagcac 300
 ctggaggcct ggtggctgca gctgaagagc gaatatcctg acttattcga gtggttttgt 360

```

gtgaagacac tgaagtgctg ctgctctcca ggaacctacg gtcccgactg tctcgcatgc 420
cagggcgat cccagaggcc ctgcagcggg aatggccact gcagcggaga tgggagcaga 480
cagggcgacg ggtcctgccc gtgccacatg gggtagcagg gcccgctgtg cactgactgc 540
atggacggct acttcagctc gctccggaac gagaccaca gcatctgcac agcctgtgac 600
gagtcctgca agacgtgctc gggcctgacc aacagagact gcggcgagtg tgaagtgggc 660
tgggtgctgg acgagggcgc ctgtgtggat gtggacgagt gtgcggccga gccgcctccc 720
tgcagcgtg cgcagttctg taagaacgcc aacggctcct acacgtgcga agagtgtgac 780
tccagctgtg tgggctgcac aggggaaggc ccaggaaact gtaaagagtg tatctctggc 840
tacgcgaggg agcacggaca gtgtgcagat gtggacgagt gctcactagc agaaaaaacc 900
tgtgtgagga aaaacgaaaa ctgctacaat actccaggga gctacgtctg tgtgtgtcct 960
gacggcttcg aagaaacgga agatgcctgt gtgccgccgg cagaggctga agccacagaa 1020
ggagaaagcc cgacacagct gccctccgc gaagacctg 1059

```

<210> 326
 <211> 353
 <212> PRT
 <213> Homo sapiens

```

<400> 326
Met Arg Leu Pro Arg Arg Ala Ala Leu Gly Leu Leu Pro Leu Leu Leu
 1          5          10          15
Leu Leu Pro Pro Ala Pro Glu Ala Ala Lys Lys Pro Thr Pro Cys His
 20          25          30
Arg Cys Arg Gly Leu Val Asp Lys Phe Asn Gln Gly Met Val Asp Thr
 35          40          45
Ala Lys Lys Asn Phe Gly Gly Gly Asn Thr Ala Trp Glu Glu Lys Thr
 50          55          60
Leu Ser Lys Tyr Glu Ser Ser Glu Ile Arg Leu Leu Glu Ile Leu Glu
 65          70          75          80
Gly Leu Cys Glu Ser Ser Asp Phe Glu Cys Asn Gln Met Leu Glu Ala
 85          90          95
Gln Glu Glu His Leu Glu Ala Trp Trp Leu Gln Leu Lys Ser Glu Tyr
100          105          110
Pro Asp Leu Phe Glu Trp Phe Cys Val Lys Thr Leu Lys Val Cys Cys
115          120          125
Ser Pro Gly Thr Tyr Gly Pro Asp Cys Leu Ala Cys Gln Gly Gly Ser
130          135          140
Gln Arg Pro Cys Ser Gly Asn Gly His Cys Ser Gly Asp Gly Ser Arg
145          150          155          160
Gln Gly Asp Gly Ser Cys Arg Cys His Met Gly Tyr Gln Gly Pro Leu
165          170          175
Cys Thr Asp Cys Met Asp Gly Tyr Phe Ser Ser Leu Arg Asn Glu Thr
180          185          190
His Ser Ile Cys Thr Ala Cys Asp Glu Ser Cys Lys Thr Cys Ser Gly
195          200          205
Leu Thr Asn Arg Asp Cys Gly Glu Cys Glu Val Gly Trp Val Leu Asp
210          215          220
Glu Gly Ala Cys Val Asp Val Asp Glu Cys Ala Glu Pro Pro Pro
225          230          235          240
Cys Ser Ala Ala Gln Phe Cys Lys Asn Ala Asn Gly Ser Tyr Thr Cys
245          250          255
Glu Glu Cys Asp Ser Ser Cys Val Gly Cys Thr Gly Glu Gly Pro Gly
260          265          270
Asn Cys Lys Glu Cys Ile Ser Gly Tyr Ala Arg Glu His Gly Gln Cys
275          280          285
Ala Asp Val Asp Glu Cys Ser Leu Ala Glu Lys Thr Cys Val Arg Lys
290          295          300

```


Asn	Glu	Asn	Cys	Tyr	Asn	Thr	Pro	Gly	Ser	Tyr	Val	Cys	Val	Cys	Pro
305					310					315					320
Asp	Gly	Phe	Glu	Glu	Thr	Glu	Asp	Ala	Cys	Val	Pro	Pro	Ala	Glu	Ala
			325						330					335	
Glu	Ala	Thr	Glu	Gly	Glu	Ser	Pro	Thr	Gln	Leu	Pro	Ser	Arg	Glu	Asp
			340					345					350		
Leu															

<210> 327
 <211> 24
 <212> PRT
 <213> Homo sapiens

Met	Arg	Leu	Pro	Arg	Arg	Ala	Ala	Leu	Gly	Leu	Leu	Pro	Leu	Leu	Leu
1				5					10					15	
Leu	Leu	Pro	Pro	Ala	Pro	Glu	Ala								
			20												

<210> 328
 <211> 329
 <212> PRT
 <213> Homo sapiens

Ala	Lys	Lys	Pro	Thr	Pro	Cys	His	Arg	Cys	Arg	Gly	Leu	Val	Asp	Lys
1				5					10					15	
Phe	Asn	Gln	Gly	Met	Val	Asp	Thr	Ala	Lys	Lys	Asn	Phe	Gly	Gly	Gly
			20					25					30		
Asn	Thr	Ala	Trp	Glu	Glu	Lys	Thr	Leu	Ser	Lys	Tyr	Glu	Ser	Ser	Glu
		35					40					45			
Ile	Arg	Leu	Leu	Glu	Ile	Leu	Glu	Gly	Leu	Cys	Glu	Ser	Ser	Asp	Phe
	50					55					60				
Glu	Cys	Asn	Gln	Met	Leu	Glu	Ala	Gln	Glu	Glu	His	Leu	Glu	Ala	Trp
65					70					75					80
Trp	Leu	Gln	Leu	Lys	Ser	Glu	Tyr	Pro	Asp	Leu	Phe	Glu	Trp	Phe	Cys
				85					90					95	
Val	Lys	Thr	Leu	Lys	Val	Cys	Cys	Ser	Pro	Gly	Thr	Tyr	Gly	Pro	Asp
			100					105					110		
Cys	Leu	Ala	Cys	Gln	Gly	Gly	Ser	Gln	Arg	Pro	Cys	Ser	Gly	Asn	Gly
		115					120					125			
His	Cys	Ser	Gly	Asp	Gly	Ser	Arg	Gln	Gly	Asp	Gly	Ser	Cys	Arg	Cys
	130					135					140				
His	Met	Gly	Tyr	Gln	Gly	Pro	Leu	Cys	Thr	Asp	Cys	Met	Asp	Gly	Tyr
145					150					155					160
Phe	Ser	Ser	Leu	Arg	Asn	Glu	Thr	His	Ser	Ile	Cys	Thr	Ala	Cys	Asp
				165					170					175	
Glu	Ser	Cys	Lys	Thr	Cys	Ser	Gly	Leu	Thr	Asn	Arg	Asp	Cys	Gly	Glu
			180					185					190		
Cys	Glu	Val	Gly	Trp	Val	Leu	Asp	Glu	Gly	Ala	Cys	Val	Asp	Val	Asp
		195					200					205			
Glu	Cys	Ala	Ala	Glu	Pro	Pro	Pro	Cys	Ser	Ala	Ala	Gln	Phe	Cys	Lys
	210					215					220				

Asn	Ala	Asn	Gly	Ser	Tyr	Thr	Cys	Glu	Glu	Cys	Asp	Ser	Ser	Cys	Val
225					230					235					240
Gly	Cys	Thr	Gly	Glu	Gly	Pro	Gly	Asn	Cys	Lys	Glu	Cys	Ile	Ser	Gly
			245						250					255	
Tyr	Ala	Arg	Glu	His	Gly	Gln	Cys	Ala	Asp	Val	Asp	Glu	Cys	Ser	Leu
			260					265					270		

Ala	Glu	Lys	Thr	Cys	Val	Arg	Lys	Asn	Glu	Asn	Cys	Tyr	Asn	Thr	Pro
		275					280					285			
Gly	Ser	Tyr	Val	Cys	Val	Cys	Pro	Asp	Gly	Phe	Glu	Glu	Thr	Glu	Asp
	290					295					300				
Ala	Cys	Val	Pro	Pro	Ala	Glu	Ala	Glu	Ala	Thr	Glu	Gly	Glu	Ser	Pro
305					310					315					320
Thr	Gln	Leu	Pro	Ser	Arg	Glu	Asp	Leu							
				325											

<210> 329
 <211> 2730
 <212> DNA
 <213> Homo sapiens

<400> 329

gtcgacccac	gcgtccgtcc	tgcggcccca	gcctctcctc	acgctcgcgc	agtctccgcc	60
gcagtctcag	ctgcagctgc	aggactgagc	cgtgcacccg	gaggagaccc	ccggaggagg	120
cgacaaactt	cgcagtgccg	cgacccaacc	ccagccctgg	gtagcctgca	gcatggccca	180
gctgttctctg	cccctgctgg	cagccctggg	cctggcccag	gctcctgcag	ctttagcaga	240
tgttctggaa	ggagacagct	cagaggaccg	cgcttttcgc	gtgcgcacgc	cgggcgacgc	300
gccactgcag	ggcgtgctcg	gcggcgccct	caccatccct	tgccacgtcc	actacctgcg	360
gccaccgccg	agccgccggg	ctgtgctggg	ctctccgcgg	gtcaagtgga	ctttcctgtc	420
ccggggcccg	gaggcagagg	tgctgggtgg	gcggggagtg	cgcgtaagg	tgaacgaggc	480
ctaccggttc	cgcgtagcac	tgcctgcgta	cccagcgtcg	ctcaccgacg	tctccctggc	540
gctgagcgag	ctgcgccccca	acgactcagg	tatctatcgc	tgtgagggtcc	agcacggcat	600
cgatgacagc	agcgacgctg	tggagggtcaa	gggtcaaagg	gtcgtctttc	tctaccgaga	660
gggctctgcc	cgctatgctt	tctccttttc	tggggcccag	gaggcctgtg	cccgcattgg	720
agccacatc	gccaccccg	agcagctcta	tgcgcctac	cttgggggct	atgagcaatg	780
tgatgctggc	tggctgtcgg	atcagaccgt	gaggtatccc	atccagaccc	cacgagaggc	840
ctgttacgga	gacatggatg	gcttccccgg	gggtccggaac	tatgggtgtg	tggacccgga	900
tgacctctat	gatgtgtact	gttatgtctga	agacctaaat	ggagaactgt	tcttgggtga	960
ccctccagag	aagctgacat	tggaggaagc	acgggcgtac	tgccaggagc	ggggtgcaga	1020
gattgccacc	acgggccaac	tgtatgcagc	ctgggatggg	ggcctggacc	actgcagccc	1080
aggggtggcta	gctgatggca	gtgtgcgcta	ccccatcgtc	acacccagcc	agcgtgtgtg	1140
tgggggcttg	cctgggtgtca	agactctctt	cctcttcccc	aaccagactg	gcttcccca	1200
taagcacagc	cgcttcaacg	tctactgctt	ccgagactcg	gcccagcctt	ctgccatccc	1260
tgaggcctcc	aaccagcct	ccaaccagc	ctctgatgga	ctagaggcta	tcgtcacagt	1320
gacagagacc	ctggaggaac	tgcagctgcc	tcaggaagcc	acagagagtg	aatcccgtgg	1380
ggccatctac	tccatcccca	tcatggagga	cggaggagggt	ggaagctcca	ctccagaaga	1440
cccagcagag	gcccctagga	cgctcctaga	atttgaaaca	caatccatgg	taccgcccac	1500
ggggttctca	gaagaggaag	gtaaggcatt	ggaggaagaa	gagaaatatg	aagatgaaga	1560
agagaaagag	gaggaagaag	aagaggagga	ggtggaggat	gaggctctgt	gggcatggcc	1620
cagcgagctc	agcagcccgg	gccctgaggc	ctctctcccc	actgagccag	cagcccagga	1680
gaagtcactc	tcccaggcgc	cagcaagggc	agtcctgcag	cctgggtgcat	caccacttcc	1740
tgatggagag	tcagaagctt	ccaggcctcc	aagggtccat	ggaccaccta	ctgagactct	1800
gcccactccc	agggagagga	acctagcatc	cccatacct	tccactctgg	ttgaggcaag	1860
agaggtgggg	gaggcaactg	gtggtcctga	gctatctggg	gtccctcgag	gagagagcga	1920
ggagacagga	agctccgagg	gtgccccttc	cctgcttcca	gccacacggg	cccctgaggg	1980
taccagggag	ctggaggccc	cctctgaaga	taattctgga	agaactgccc	cagcagggac	2040

ctcagtgcag	gcccagccag	tgctgcccac	tgacagcgcc	agccgaggtg	gagtggccgt	2100
gggtccccgca	tcaggtaatt	ctgcccgaag	ctcaactgcc	ctctctatcc	tactcctttt	2160
cttccccctg	cagctctggg	tcacctgacc	tgtagtcctt	taaccaccca	tcatcccaaa	2220
ctctcctgtc	ctttgccttc	attctcttac	ccacctctac	ctatgggtct	ccaatctcgg	2280
atateccacct	tgtgggtatc	tcagctctcc	gcgtctttac	cctgtgatcc	cagccccgcc	2340
actgaccatc	tgtgaccctt	ccctgccatt	ggggccctcca	cctgtggctc	acatctcgcc	2400
agccccacag	agcatcctca	ggcctctcca	agggtcctca	tcacctattg	cagccttcag	2460
ggctcggcct	attttccact	actcccttca	tccgcctgtg	tgcggtcccc	tttagctgcc	2520
tcctattgat	ctcaggggaag	cctggggagtc	ccttctcacc	cctcaacctc	cggagtccag	2580
gagaacccgt	acccccacag	agccttaagc	aactacttct	gtgaagtatt	ttttgactgt	2640
ttcatggaaa	acaagccttg	gaaataaatc	tctattaaac	cgctttgtaa	ccaaaaaaaa	2700
aaaaaaaaaa	aaaaaaaaaa	gggcggccgc				2730

<210> 330
 <211> 2013
 <212> DNA
 <213> Homo sapiens

<400> 330						
atggcccagc	tgttcctgcc	cctgctggca	gccctggtec	tggcccaggc	tcctgcagct	60
ttagcagatg	ttctggaagg	agacagctca	gaggaccgcg	cttttcgcgt	gcgcacgcg	120
ggcgacgcgc	cactgcaggg	cgtgctcggc	ggcgccctca	ccatcccttg	ccacgtccac	180
tacctgctgc	caccgcccag	ccgcccggct	gtgctgggct	ctccgcgggt	caagtggact	240
ttcctgtccc	ggggccggga	ggcagagggt	ctgggtggcg	ggggagtgcg	cgtcaagggt	300
aacgaggcct	accggttccg	cgtggcactg	cctgcgtacc	cagcgtcgct	caccgacgtc	360
tccttggcgc	tgagcgagct	gcgccccaac	gactcaggta	tctatcgctg	tgagggtccag	420
cacggcatcg	atgacagcag	cgacgctgtg	gagggtcaagg	tcaaaggggt	cgtctttctc	480
taccgagagg	gctctgcccc	ctatgctttc	tccttttctg	gggcccagga	ggcctgtgcc	540
cgcattggag	cccacatcgc	caccccggag	cagctctatg	ccgcctacct	tgggggctat	600
gagcaatgtg	atgctggctg	gctgtcggat	cagaccgtga	ggtatcccat	ccagacccca	660
cgagaggcct	gttacggaga	catggatggc	ttccccgggg	tccggaaacta	tgggtgtggtg	720
gacccggatg	acctctatga	tgtgtactgt	tatgctgaag	acctaaatgg	agaactgttc	780
ctgggtgacc	ctccagagaa	gctgacattg	gaggaagcac	gggcgtactg	ccaggagcgg	840
ggtgcagaga	ttgccaccac	gggccaactg	tatgcagcct	gggatgggtg	cctggaccac	900
tgcagcccag	ggtggctagc	tgatggcagt	gtgcgtacc	ccatcgtcac	accagccag	960
cgctgtgggtg	ggggcttgcc	tgggtgtcaag	actctcttcc	tcttcccca	ccagactggc	1020
ttccccaata	agcacagccg	cttcaacgtc	tactgcttcc	gagactcggc	ccagccttct	1080
gccatccctg	aggcctccaa	cccagcctcc	aaccagcct	ctgatggact	agaggctatc	1140
gtcacagtga	cagagaccct	ggaggaactg	cagctgcctc	aggaagccac	agagagtga	1200
tcccggtggg	ccatctactc	catccccatc	atggaggacg	gaggagggtg	aagctccact	1260
ccagaagacc	cagcagaggc	ccctaggacg	ctcctagaat	ttgaaacaca	atccatggta	1320
ccgcccacgg	ggttctcaga	agaggaagggt	aaggcattgg	aggaagaaga	gaaatatgaa	1380
gatgaagaag	agaaagagga	ggaagaagaa	gaggaggagg	tggaggatga	ggctctgtgg	1440
gcatggccca	gcgagctcag	cagccccggc	cctgaggcct	ctctccccac	tgagccagca	1500
gcccaggaga	agtcactctc	ccaggcgcca	gcaagggcag	tcttgcagcc	tgggtgcatca	1560
ccacttcctg	atggagagtc	agaagcttcc	aggcctccaa	gggtccatgg	accacctact	1620
gagactctgc	ccactcccag	ggagaggaac	ctagcatccc	catcaccttc	cactctggtt	1680
gaggcaagag	aggtggggga	ggcaactggt	ggtcctgagc	tatctgggggt	ccctcgagga	1740
gagagcgagg	agacaggaag	ctccgaggggt	gccccttccc	tgcttccagc	cacacgggcc	1800
cctgagggtg	ccagggagct	ggaggccccc	tctgaagata	attctggaag	aactgcccc	1860
gcagggacct	cagtgcaggc	ccagccagtg	ctgccactg	acagcgccag	ccgagggtga	1920
gtggccgtgg	tccccgcata	aggtaattct	gcccagggt	caactgccct	ctctatccta	1980
ctccttttct	tccccctgca	gctctgggtc	acc			2013

<210> 331
 <211> 671
 <212> PRT

<213> Homo sapiens

<400> 331

Met	Ala	Gln	Leu	Phe	Leu	Pro	Leu	Leu	Ala	Ala	Leu	Val	Leu	Ala	Gln
1				5					10					15	
Ala	Pro	Ala	Ala	Leu	Ala	Asp	Val	Leu	Glu	Gly	Asp	Ser	Ser	Glu	Asp
			20					25					30		
Arg	Ala	Phe	Arg	Val	Arg	Ile	Ala	Gly	Asp	Ala	Pro	Leu	Gln	Gly	Val
		35				40						45			
Leu	Gly	Gly	Ala	Leu	Thr	Ile	Pro	Cys	His	Val	His	Tyr	Leu	Arg	Pro
50					55						60				
Pro	Pro	Ser	Arg	Arg	Ala	Val	Leu	Gly	Ser	Pro	Arg	Val	Lys	Trp	Thr
65				70					75						80
Phe	Leu	Ser	Arg	Gly	Arg	Glu	Ala	Glu	Val	Leu	Val	Ala	Arg	Gly	Val
				85				90						95	
Arg	Val	Lys	Val	Asn	Glu	Ala	Tyr	Arg	Phe	Arg	Val	Ala	Leu	Pro	Ala
			100				105						110		
Tyr	Pro	Ala	Ser	Leu	Thr	Asp	Val	Ser	Leu	Ala	Leu	Ser	Glu	Leu	Arg
		115				120						125			
Pro	Asn	Asp	Ser	Gly	Ile	Tyr	Arg	Cys	Glu	Val	Gln	His	Gly	Ile	Asp
130					135						140				
Asp	Ser	Ser	Asp	Ala	Val	Glu	Val	Lys	Val	Lys	Gly	Val	Val	Phe	Leu
145				150					155						160
Tyr	Arg	Glu	Gly	Ser	Ala	Arg	Tyr	Ala	Phe	Ser	Phe	Ser	Gly	Ala	Gln
				165				170						175	
Glu	Ala	Cys	Ala	Arg	Ile	Gly	Ala	His	Ile	Ala	Thr	Pro	Glu	Gln	Leu
		180				185							190		
Tyr	Ala	Ala	Tyr	Leu	Gly	Gly	Tyr	Glu	Gln	Cys	Asp	Ala	Gly	Trp	Leu
	195					200						205			
Ser	Asp	Gln	Thr	Val	Arg	Tyr	Pro	Ile	Gln	Thr	Pro	Arg	Glu	Ala	Cys
210					215						220				
Tyr	Gly	Asp	Met	Asp	Gly	Phe	Pro	Gly	Val	Arg	Asn	Tyr	Gly	Val	Val
225				230					235						240
Asp	Pro	Asp	Asp	Leu	Tyr	Asp	Val	Tyr	Cys	Tyr	Ala	Glu	Asp	Leu	Asn
				245				250						255	
Gly	Glu	Leu	Phe	Leu	Gly	Asp	Pro	Pro	Glu	Lys	Leu	Thr	Leu	Glu	Glu
		260				265							270		
Ala	Arg	Ala	Tyr	Cys	Gln	Glu	Arg	Gly	Ala	Glu	Ile	Ala	Thr	Thr	Gly
	275					280						285			
Gln	Leu	Tyr	Ala	Ala	Trp	Asp	Gly	Gly	Leu	Asp	His	Cys	Ser	Pro	Gly
290					295						300				
Trp	Leu	Ala	Asp	Gly	Ser	Val	Arg	Tyr	Pro	Ile	Val	Thr	Pro	Ser	Gln
305				310						315					320
Arg	Cys	Gly	Gly	Gly	Leu	Pro	Gly	Val	Lys	Thr	Leu	Phe	Leu	Phe	Pro
				325				330						335	
Asn	Gln	Thr	Gly	Phe	Pro	Asn	Lys	His	Ser	Arg	Phe	Asn	Val	Tyr	Cys
		340				345						350			
Phe	Arg	Asp	Ser	Ala	Gln	Pro	Ser	Ala	Ile	Pro	Glu	Ala	Ser	Asn	Pro
	355					360						365			
Ala	Ser	Asn	Pro	Ala	Ser	Asp	Gly	Leu	Glu	Ala	Ile	Val	Thr	Val	Thr
	370				375						380				
Glu	Thr	Leu	Glu	Glu	Leu	Gln	Leu	Pro	Gln	Glu	Ala	Thr	Glu	Ser	Glu
385				390						395					400
Ser	Arg	Gly	Ala	Ile	Tyr	Ser	Ile	Pro	Ile	Met	Glu	Asp	Gly	Gly	Gly
			405					410					415		
Gly	Ser	Ser	Thr	Pro	Glu	Asp	Pro	Ala	Glu	Ala	Pro	Arg	Thr	Leu	Leu
			420				425						430		

Glu Phe Glu Thr Gln Ser Met Val Pro Pro Thr Gly Phe Ser Glu Glu
 435 440 445
 Glu Gly Lys Ala Leu Glu Glu Glu Lys Tyr Glu Asp Glu Glu Glu
 450 455 460
 Lys Glu Glu Glu Glu Glu Glu Glu Val Glu Asp Glu Ala Leu Trp
 465 470 475 480
 Ala Trp Pro Ser Glu Leu Ser Ser Pro Gly Pro Glu Ala Ser Leu Pro
 485 490 495
 Thr Glu Pro Ala Ala Gln Glu Lys Ser Leu Ser Gln Ala Pro Ala Arg
 500 505 510
 Ala Val Leu Gln Pro Gly Ala Ser Pro Leu Pro Asp Gly Glu Ser Glu
 515 520 525
 Ala Ser Arg Pro Pro Arg Val His Gly Pro Pro Thr Glu Thr Leu Pro
 530 535 540
 Thr Pro Arg Glu Arg Asn Leu Ala Ser Pro Ser Pro Ser Thr Leu Val
 545 550 555 560
 Glu Ala Arg Glu Val Gly Glu Ala Thr Gly Gly Pro Glu Leu Ser Gly
 565 570 575
 Val Pro Arg Gly Glu Ser Glu Glu Thr Gly Ser Ser Glu Gly Ala Pro
 580 585 590
 Ser Leu Leu Pro Ala Thr Arg Ala Pro Glu Gly Thr Arg Glu Leu Glu
 595 600 605
 Ala Pro Ser Glu Asp Asn Ser Gly Arg Thr Ala Pro Ala Gly Thr Ser
 610 615 620
 Val Gln Ala Gln Pro Val Leu Pro Thr Asp Ser Ala Ser Arg Gly Gly
 625 630 635 640
 Val Ala Val Val Pro Ala Ser Gly Asn Ser Ala Gln Gly Ser Thr Ala
 645 650 655
 Leu Ser Ile Leu Leu Phe Phe Pro Leu Gln Leu Trp Val Thr
 660 665 670

<210> 332
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 332
 Met Ala Gln Leu Phe Leu Pro Leu Leu Ala Ala Leu Val Leu Ala Gln
 1 5 10 15
 Ala Pro Ala Ala Leu Ala
 20

<210> 333
 <211> 649
 <212> PRT
 <213> Homo sapiens

<400> 333
 Asp Val Leu Glu Gly Asp Ser Ser Glu Asp Arg Ala Phe Arg Val Arg
 1 5 10 15
 Ile Ala Gly Asp Ala Pro Leu Gln Gly Val Leu Gly Gly Ala Leu Thr
 20 25 30
 Ile Pro Cys His Val His Tyr Leu Arg Pro Pro Pro Ser Arg Arg Ala
 35 40 45
 Val Leu Gly Ser Pro Arg Val Lys Trp Thr Phe Leu Ser Arg Gly Arg

50	55	60
Glu Ala Glu Val Leu Val Ala Arg Gly Val Arg Val Lys Val Asn Glu		
65	70	75
Ala Tyr Arg Phe Arg Val Ala Leu Pro Ala Tyr Pro Ala Ser Leu Thr		80
	85	90
Asp Val Ser Leu Ala Leu Ser Glu Leu Arg Pro Asn Asp Ser Gly Ile		95
	100	105
Tyr Arg Cys Glu Val Gln His Gly Ile Asp Asp Ser Ser Asp Ala Val		110
	115	120
Glu Val Lys Val Lys Gly Val Val Phe Leu Tyr Arg Glu Gly Ser Ala		125
	130	135
Arg Tyr Ala Phe Ser Phe Ser Gly Ala Gln Glu Ala Cys Ala Arg Ile		140
145	150	155
Gly Ala His Ile Ala Thr Pro Glu Gln Leu Tyr Ala Ala Tyr Leu Gly		160
	165	170
Gly Tyr Glu Gln Cys Asp Ala Gly Trp Leu Ser Asp Gln Thr Val Arg		175
	180	185
Tyr Pro Ile Gln Thr Pro Arg Glu Ala Cys Tyr Gly Asp Met Asp Gly		190
	195	200
Phe Pro Gly Val Arg Asn Tyr Gly Val Val Asp Pro Asp Asp Leu Tyr		205
210	215	220
Asp Val Tyr Cys Tyr Ala Glu Asp Leu Asn Gly Glu Leu Phe Leu Gly		225
225	230	235
Asp Pro Pro Glu Lys Leu Thr Leu Glu Glu Ala Arg Ala Tyr Cys Gln		240
	245	250
Glu Arg Gly Ala Glu Ile Ala Thr Thr Gly Gln Leu Tyr Ala Ala Trp		255
	260	265
Asp Gly Gly Leu Asp His Cys Ser Pro Gly Trp Leu Ala Asp Gly Ser		270
	275	280
Val Arg Tyr Pro Ile Val Thr Pro Ser Gln Arg Cys Gly Gly Gly Leu		285
290	295	300
Pro Gly Val Lys Thr Leu Phe Leu Phe Pro Asn Gln Thr Gly Phe Pro		305
305	310	315
Asn Lys His Ser Arg Phe Asn Val Tyr Cys Phe Arg Asp Ser Ala Gln		320
	325	330
Pro Ser Ala Ile Pro Glu Ala Ser Asn Pro Ala Ser Asn Pro Ala Ser		335
	340	345
Asp Gly Leu Glu Ala Ile Val Thr Val Thr Glu Thr Leu Glu Glu Leu		350
	355	360
Gln Leu Pro Gln Glu Ala Thr Glu Ser Glu Ser Arg Gly Ala Ile Tyr		365
	370	375
Ser Ile Pro Ile Met Glu Asp Gly Gly Gly Ser Ser Thr Pro Glu		380
385	390	395
Asp Pro Ala Glu Ala Pro Arg Thr Leu Leu Glu Phe Glu Thr Gln Ser		400
	405	410
Met Val Pro Pro Thr Gly Phe Ser Glu Glu Glu Gly Lys Ala Leu Glu		415
	420	425
Glu Glu Glu Lys Tyr Glu Asp Glu Glu Glu Lys Glu Glu Glu Glu		430
	435	440
Glu Glu Glu Val Glu Asp Glu Ala Leu Trp Ala Trp Pro Ser Glu Leu		445
	450	455
Ser Ser Pro Gly Pro Glu Ala Ser Leu Pro Thr Glu Pro Ala Ala Gln		460
465	470	475
Glu Lys Ser Leu Ser Gln Ala Pro Ala Arg Ala Val Leu Gln Pro Gly		480
	485	490
Ala Ser Pro Leu Pro Asp Gly Glu Ser Glu Ala Ser Arg Pro Pro Arg		495
	500	505
		510

Val	His	Gly	Pro	Pro	Thr	Glu	Thr	Leu	Pro	Thr	Pro	Arg	Glu	Arg	Asn
		515					520					525			
Leu	Ala	Ser	Pro	Ser	Pro	Ser	Thr	Leu	Val	Glu	Ala	Arg	Glu	Val	Gly
	530					535					540				
Glu	Ala	Thr	Gly	Gly	Pro	Glu	Leu	Ser	Gly	Val	Pro	Arg	Gly	Glu	Ser
545					550					555					560
Glu	Glu	Thr	Gly	Ser	Ser	Glu	Gly	Ala	Pro	Ser	Leu	Leu	Pro	Ala	Thr
			565					570						575	
Arg	Ala	Pro	Glu	Gly	Thr	Arg	Glu	Leu	Glu	Ala	Pro	Ser	Glu	Asp	Asn
			580				585						590		
Ser	Gly	Arg	Thr	Ala	Pro	Ala	Gly	Thr	Ser	Val	Gln	Ala	Gln	Pro	Val
	595						600					605			
Leu	Pro	Thr	Asp	Ser	Ala	Ser	Arg	Gly	Gly	Val	Ala	Val	Val	Pro	Ala
	610					615					620				
Ser	Gly	Asn	Ser	Ala	Gln	Gly	Ser	Thr	Ala	Leu	Ser	Ile	Leu	Leu	Leu
625					630					635					640
Phe	Phe	Pro	Leu	Gln	Leu	Trp	Val	Thr							
				645											

<210> 334

<211> 456

<212> PRT

<213> Pigeon pea witches'-broom phytoplasma

<400> 334

Met	Asn	Leu	Asp	Ile	His	Cys	Glu	Gln	Leu	Ser	Asp	Ala	Arg	Trp	Thr
1				5					10					15	
Glu	Leu	Leu	Pro	Leu	Leu	Gln	Gln	Tyr	Glu	Val	Val	Arg	Leu	Asp	Asp
			20					25					30		
Cys	Gly	Leu	Thr	Glu	Glu	His	Cys	Lys	Asp	Ile	Gly	Ser	Ala	Leu	Arg
		35					40					45			
Ala	Asn	Pro	Ser	Leu	Thr	Glu	Leu	Cys	Leu	Arg	Thr	Asn	Glu	Leu	Gly
	50					55					60				
Asp	Ala	Gly	Val	His	Leu	Val	Leu	Gln	Gly	Leu	Gln	Ser	Pro	Thr	Cys
65				70						75					80
Lys	Ile	Gln	Lys	Leu	Ser	Leu	Gln	Asn	Cys	Ser	Leu	Thr	Glu	Ala	Gly
			85					90						95	
Cys	Gly	Val	Leu	Pro	Ser	Thr	Leu	Arg	Ser	Leu	Pro	Thr	Leu	Arg	Glu
		100						105					110		
Leu	His	Leu	Ser	Asp	Asn	Pro	Leu	Gly	Asp	Ala	Gly	Leu	Arg	Leu	Leu
		115					120					125			
Cys	Glu	Gly	Leu	Leu	Asp	Pro	Gln	Cys	His	Leu	Glu	Lys	Leu	Gln	Leu
	130					135					140				
Glu	Tyr	Cys	Arg	Leu	Thr	Ala	Ala	Ser	Cys	Glu	Pro	Leu	Ala	Ser	Val
145					150					155					160
Leu	Arg	Ala	Thr	Arg	Ala	Leu	Lys	Glu	Leu	Thr	Val	Ser	Asn	Asn	Asp
			165						170					175	
Ile	Gly	Glu	Ala	Gly	Ala	Arg	Val	Leu	Gly	Gln	Gly	Leu	Ala	Asp	Ser
			180					185					190		
Ala	Cys	Gln	Leu	Glu	Thr	Leu	Arg	Leu	Glu	Asn	Cys	Gly	Leu	Thr	Pro
		195					200					205			
Ala	Asn	Cys	Lys	Asp	Leu	Cys	Gly	Ile	Val	Ala	Ser	Gln	Ala	Ser	Leu
	210					215					220				
Arg	Glu	Leu	Asp	Leu	Gly	Ser	Asn	Gly	Leu	Gly	Asp	Ala	Gly	Ile	Ala
225					230					235					240
Glu	Leu	Cys	Pro	Gly	Leu	Leu	Ser	Pro	Ala	Ser	Arg	Leu	Lys	Thr	Leu

Trp	Leu	Trp	Glu	Cys	Asp	Ile	Thr	Ala	Ser	Gly	Cys	Arg	Asp	Leu	Cys
			245					250					255		
Arg	Val	Leu	Gln	Ala	Lys	Glu	Thr	Leu	Lys	Glu	Leu	Ser	Leu	Ala	Gly
		275					280					285			
Asn	Lys	Leu	Gly	Asp	Glu	Gly	Ala	Arg	Leu	Leu	Cys	Glu	Ser	Leu	Leu
	290					295					300				
Gln	Pro	Gly	Cys	Gln	Leu	Glu	Ser	Leu	Trp	Val	Lys	Ser	Cys	Ser	Leu
305					310					315					320
Thr	Ala	Ala	Cys	Cys	Gln	His	Val	Ser	Leu	Met	Leu	Thr	Gln	Asn	Lys
				325					330					335	
His	Leu	Leu	Glu	Leu	Gln	Leu	Ser	Ser	Asn	Lys	Leu	Gly	Asp	Ser	Gly
			340					345					350		
Ile	Gln	Glu	Leu	Cys	Gln	Ala	Leu	Ser	Gln	Pro	Gly	Thr	Thr	Leu	Arg
		355					360					365			
Val	Leu	Cys	Leu	Gly	Asp	Cys	Glu	Val	Thr	Asn	Ser	Gly	Cys	Ser	Ser
	370					375					380				
Leu	Ala	Ser	Leu	Leu	Leu	Ala	Asn	Arg	Ser	Leu	Arg	Glu	Leu	Asp	Leu
385					390					395					400
Ser	Asn	Asn	Cys	Val	Gly	Asp	Pro	Gly	Val	Leu	Gln	Leu	Leu	Gly	Ser
			405					410						415	
Leu	Glu	Gln	Pro	Gly	Cys	Ala	Leu	Glu	Gln	Leu	Val	Leu	Tyr	Asp	Thr
			420					425					430		
Tyr	Trp	Thr	Glu	Glu	Val	Glu	Asp	Arg	Leu	Gln	Ala	Leu	Glu	Gly	Ser
		435					440					445			
Lys	Pro	Gly	Leu	Arg	Val	Ile	Ser								
	450					455									

<210> 335
 <211> 834
 <212> PRT
 <213> Mus sp.

<400> 335

Met	Ala	Pro	His	Trp	Ala	Val	Trp	Leu	Leu	Ala	Ala	Gly	Leu	Trp	Gly
1				5				10					15		
Leu	Gly	Ile	Gly	Ala	Glu	Met	Trp	Trp	Asn	Leu	Val	Pro	Arg	Lys	Thr
		20					25					30			
Val	Ser	Ser	Gly	Glu	Leu	Val	Thr	Val	Val	Arg	Arg	Phe	Ser	Gln	Thr
		35					40					45			
Gly	Ile	Gln	Asp	Phe	Leu	Thr	Leu	Thr	Leu	Thr	Glu	His	Ser	Gly	Leu
	50					55				60					
Leu	Tyr	Val	Gly	Ala	Arg	Glu	Ala	Leu	Phe	Ala	Phe	Ser	Val	Glu	Ala
65				70				75							80
Leu	Glu	Leu	Gln	Gly	Ala	Ile	Ser	Trp	Glu	Ala	Pro	Ala	Glu	Lys	Lys
			85					90					95		
Ile	Glu	Cys	Thr	Gln	Lys	Gly	Lys	Ser	Asn	Gln	Thr	Glu	Cys	Phe	Asn
		100						105					110		
Phe	Ile	Arg	Phe	Leu	Gln	Pro	Tyr	Asn	Ser	Ser	His	Leu	Tyr	Val	Cys
		115					120					125			
Gly	Thr	Tyr	Ala	Phe	Gln	Pro	Lys	Cys	Thr	Tyr	Ile	Asn	Met	Leu	Thr
	130					135					140				
Phe	Thr	Leu	Asp	Arg	Ala	Glu	Phe	Glu	Asp	Gly	Lys	Gly	Lys	Cys	Pro
145					150					155					160
Tyr	Asp	Pro	Ala	Lys	Gly	His	Thr	Gly	Leu	Val	Asp	Gly	Glu	Glu	Leu
				165				170					175		

Tyr	Ser	Ala	Thr	Leu	Asn	Asn	Phe	Leu	Gly	Thr	Glu	Pro	Val	Ile	Leu
			180					185					190		
Arg	Tyr	Met	Gly	Thr	His	His	Ser	Ile	Lys	Thr	Glu	Tyr	Leu	Ala	Phe
		195					200					205			
Trp	Leu	Asn	Glu	Pro	His	Phe	Val	Gly	Ser	Ala	Phe	Val	Pro	Glu	Ser
	210					215					220				
Val	Gly	Ser	Phe	Thr	Gly	Asp	Asp	Asp	Lys	Ile	Tyr	Phe	Phe	Phe	Ser
225					230					235					240
Glu	Arg	Ala	Val	Glu	Tyr	Asp	Cys	Tyr	Ser	Glu	Gln	Val	Val	Ala	Arg
				245					250					255	
Val	Ala	Arg	Val	Cys	Lys	Gly	Asp	Met	Gly	Gly	Ala	Arg	Thr	Leu	Gln
			260					265					270		
Lys	Lys	Trp	Thr	Thr	Phe	Leu	Lys	Ala	Arg	Leu	Val	Cys	Ser	Ala	Pro
		275					280					285			
Asp	Trp	Lys	Val	Tyr	Phe	Asn	Gln	Leu	Lys	Ala	Val	His	Thr	Leu	Arg
	290					295					300				
Gly	Ala	Ser	Trp	His	Asn	Thr	Thr	Phe	Phe	Gly	Val	Phe	Gln	Ala	Arg
305				310						315					320
Trp	Gly	Asp	Met	Asp	Leu	Ser	Ala	Val	Cys	Glu	Tyr	Gln	Leu	Glu	Gln
			325						330					335	
Ile	Gln	Gln	Val	Phe	Glu	Gly	Pro	Tyr	Lys	Glu	Tyr	Ser	Glu	Gln	Ala
			340					345					350		
Gln	Lys	Trp	Ala	Arg	Tyr	Thr	Asp	Pro	Val	Pro	Ser	Pro	Arg	Pro	Gly
		355					360					365			
Ser	Cys	Ile	Asn	Asn	Trp	His	Arg	Asp	Asn	Gly	Tyr	Thr	Ser	Ser	Leu
	370					375					380				
Glu	Leu	Pro	Asp	Asn	Thr	Leu	Asn	Phe	Ile	Lys	Lys	His	Pro	Leu	Met
385				390						395					400
Glu	Asp	Gln	Val	Lys	Pro	Arg	Leu	Gly	Arg	Pro	Leu	Leu	Val	Lys	Lys
				405					410					415	
Asn	Thr	Asn	Phe	Thr	His	Val	Val	Ala	Asp	Arg	Val	Pro	Gly	Leu	Asp
			420					425					430		
Gly	Ala	Thr	Tyr	Thr	Val	Leu	Phe	Ile	Gly	Thr	Gly	Asp	Gly	Trp	Leu
		435					440					445			
Leu	Lys	Ala	Val	Ser	Leu	Gly	Pro	Trp	Ile	His	Met	Val	Glu	Glu	Leu
	450					455					460				
Gln	Val	Phe	Asp	Gln	Glu	Pro	Val	Glu	Ser	Leu	Val	Leu	Ser	Gln	Ser
465				470						475					480
Lys	Lys	Val	Leu	Phe	Ala	Gly	Ser	Arg	Ser	Gln	Leu	Val	Gln	Leu	Ser
				485					490					495	
Leu	Ala	Asp	Cys	Thr	Lys	Tyr	Arg	Phe	Cys	Val	Asp	Cys	Val	Leu	Ala
		500						505					510		
Arg	Asp	Pro	Tyr	Cys	Ala	Trp	Asn	Val	Asn	Thr	Ser	Arg	Cys	Val	Ala
		515					520					525			
Thr	Thr	Ser	Gly	Arg	Ser	Gly	Ser	Phe	Leu	Val	Gln	His	Val	Ala	Asn
	530					535					540				
Leu	Asp	Thr	Ser	Lys	Met	Cys	Asn	Gln	Tyr	Gly	Ile	Lys	Lys	Val	Arg
545				550						555					560
Ser	Ile	Pro	Lys	Asn	Ile	Thr	Val	Val	Ser	Gly	Thr	Asp	Leu	Val	Leu
				565					570					575	
Pro	Cys	His	Leu	Ser	Ser	Asn	Leu	Ala	His	Ala	His	Trp	Thr	Phe	Gly
		580						585					590		
Ser	Gln	Asp	Leu	Pro	Ala	Glu	Gln	Pro	Gly	Ser	Phe	Leu	Tyr	Asp	Thr
		595					600					605			
Gly	Leu	Gln	Ala	Leu	Val	Val	Met	Ala	Ala	Gln	Ser	Arg	His	Ser	Gly
610						615					620				
Pro	Tyr	Arg	Cys	Tyr	Ser	Glu	Glu	Gln	Gly	Thr	Arg	Leu	Ala	Ala	Glu

625					630					635				640
Ser	Tyr	Leu	Val	Ala	Val	Val	Ala	Gly	Ser	Ser	Val	Thr	Leu	Glu
				645	Asn	Leu	Gly	Leu	Val	Trp	Leu	Ala	Val	Ala
Arg	Ala	Pro	Leu	Glu				665					670	
			660	Cys	Leu	Val	Leu	Leu	Leu	Val	Leu	Ser	Leu	Arg
Leu	Gly	Ala	Val				680				685			
Arg	Arg	Leu	Arg	Glu	Glu	Leu	Glu	Lys	Gly	Ala	Lys	Ala	Ser	Glu
	690					695				700				
Thr	Leu	Val	Tyr	Pro	Leu	Glu	Leu	Pro	Lys	Glu	Pro	Ala	Ser	Pro
705					710					715				720
Phe	Arg	Pro	Gly	Pro	Glu	Thr	Asp	Glu	Lys	Leu	Trp	Asp	Pro	Val
				725					730					735
Tyr	Tyr	Tyr	Ser	Asp	Gly	Ser	Leu	Lys	Ile	Val	Pro	Gly	His	Ala
			740					745					750	
Cys	Gln	Pro	Gly	Gly	Gly	Pro	Pro	Ser	Pro	Pro	Pro	Gly	Ile	Pro
		755					760					765		
Gln	Pro	Leu	Pro	Ser	Pro	Thr	Arg	Leu	His	Leu	Gly	Gly	Gly	Arg
	770					775					780			Asn
Ser	Asn	Ala	Asn	Gly	Tyr	Val	Arg	Leu	Gln	Leu	Gly	Gly	Glu	Asp
785					790					795				800
Gly	Gly	Ser	Gly	His	Pro	Leu	Pro	Glu	Leu	Ala	Asp	Glu	Leu	Arg
				805					810					815
Lys	Leu	Gln	Gln	Arg	Gln	Pro	Leu	Pro	Asp	Ser	Asn	Pro	Glu	Glu
			820					825					830	
Ser	Val													

<210> 336
 <211> 3503
 <212> DNA
 <213> Mus sp.

<400> 336

ggcaccgaggt	ggcccgagtc	aaacgcgagg	gcagcgccag	ggattggagc	tgcacgaaag	60
agggctgctg	gactgaagtt	tagaccctgg	gtgtctgcca	tggccccaca	ctgggctgtc	120
tggctgctgg	cagcagggct	gtggggcctg	ggcatcgggg	ctgagatgtg	gtggaacctt	180
gtgccccgga	agacagtatc	ttctggggag	ctgggtcacag	tagtgaggcg	gttctcccag	240
acaggcatcc	aggacttcct	gacactgacc	ctgacagaac	attctggcct	tttatatgtg	300
ggggccccgag	aggcgtgtgt	tgccttcagt	gtagaggctc	tggagctgca	aggagcgatc	360
tcttggggagg	ctccagctga	gaagaaaatt	gaatgtaccc	agaaagggaa	gagcaaccag	420
accgaatgct	tcaacttcat	ccgcttcctt	cagccataca	attcctccca	tctgtatgtc	480
tgcggcacct	atgccttcca	gccaagtgc	acctacatca	acatgctcac	gttcaccttg	540
gaccgtgcag	aatttgagga	tgggaagggt	aaatgcccac	atgacccagc	taagggtcac	600
accggactcc	ttgtggacgg	tgagctgtac	tcagccacac	tcaataactt	cctgggcaca	660
gagccgggta	tccttcgata	catggggacc	caccactcca	tcaagacaga	gtacctggct	720
ttttggctga	atgaaccca	ctttgtaggc	tctgcctttg	tccctgagag	tgtgggaagc	780
ttcaggggag	acgatgacaa	gatctacttc	ttcttcagtg	agcgggcagt	ggagtatgac	840
tgctattccg	agcaggtggt	ggctcgtgtg	cgcagagtct	gtaaggggtga	catgggggga	900
gcacggacgc	tgcagaagaa	atggacgacg	ttcctgaagg	ctcgggttgt	gtgctcagcc	960
cctgactgga	aggtctactt	caaccagctg	aaggcgggtg	acaccctgcg	gggcgcctct	1020
tggcacaaca	ccaccttctt	cggggttttt	caagcgcgat	ggggcgatat	ggacctgtct	1080
gcagtttgtg	agtaccagtt	ggaacagatc	cagcaagtgt	ttgaggggtcc	ctacaaggag	1140
tacagtgagc	aagcccagaa	gtgggcccgc	tatactgacc	cggtacccag	ccctcggcct	1200
ggttcgtgta	tcaacaactg	gcaccgagac	aatggctaca	ccagttccct	ggaactgccg	1260
gacaacaccc	tcaacttcat	caagaagcac	ccctgatagg	aggaccaggt	gaagcctcgg	1320

ttggggccgcc	ccctacttgt	gaagaagaac	actaacttca	cacacgtggt	ggccgacagg	1380
gtcccagggc	ttgatgggtg	cacctataca	gtgtttgttca	ttggtacagg	agatggctgg	1440
ctgctgaagg	ctgtgagcct	ggggccctgg	atccacatgg	tggaggaact	gcaggtgttt	1500
gaccaggagc	cagtggaaag	tctggtgctg	tctcagagca	agaaggtgct	ctttgctggc	1560
tcccgtcttc	agctggttca	gctgtctctg	gccgactgca	caaagtaccg	tttctgtgta	1620
gactgtgtcc	tggccagggg	cccttactgt	gcctggaatg	tcaacaccag	ccgctgtgtg	1680
gccaccacca	gtggctgctc	ggggtccttt	ctgggtccaac	atgtggcgaa	cttggacact	1740
tcaaagatgt	gtaaccagta	tggcattaaa	aaagtcagat	ctattcccaa	gaacatcacc	1800
gttgtgtcag	gcacagacct	ggctcctacc	tgccacctct	cgtccaattt	ggcccatgcc	1860
cactggacct	tcggaagcca	ggacctgcct	gcagaacaac	ctggctcctt	tctttatgac	1920
acgggactcc	aggcgctggt	ggtgatggcc	gcacagtccc	gtcactctgg	accctatcgt	1980
tgctattcag	aggagcaggg	gacaagactg	gctgcagaaa	gctaccttgt	tgctgtcgtg	2040
gccggctcgt	cgggtgacact	ggaggcacgg	gctcccttgg	aaaacctggg	gctcgtgtgg	2100
ctcgctgtgg	tggccctggg	ggctgtgtgc	ctgggtgctgc	tgctgtctgg	cctatcgctc	2160
cgccggcgac	ttcgagaaga	gctagaaaag	ggtgccaaagg	catctgagag	gacactgggtg	2220
tacccttgg	aactgcccaa	ggagcctgcc	agtccccctt	tccgtcctgg	ccccgaaact	2280
gatgagaaac	tttgggatcc	tgctgggtac	tactattcgg	atggctctct	caagattgtg	2340
cctgggtcacg	cccgggtgcc	gcctgggggt	gggccccctt	ccccacctcc	tggcatacct	2400
ggccagcctc	tgccttctcc	aactcggctc	cacctaggag	gtggtcggaa	ctcaaatgcc	2460
aatggttatg	tgcgtttaca	gttgggcgga	gaggaccgag	gaggatctgg	gcacccactg	2520
cctgagctcg	cggatgaatt	acgacggaaa	ctacaacagc	gccagccgct	gcctgactcc	2580
aaccagagg	agtcttcagt	atgaggggac	ccccccacct	cattggcggg	gggggggtctc	2640
atggggggtg	cactcttaac	ttttgcacag	gcaccagcta	cctcagggac	atggcagggg	2700
cacttgctct	gcctgggaca	gacactgccc	atcatttgcc	cggccgtgag	gacctgtca	2760
gcatgggcac	tgccacttgg	tgtggctcac	caggacttca	gcctcacagg	agacacaccc	2820
tcctctgtga	atattgagaca	tgtgggaccc	cagcagccaa	aactttgcaa	ggaagagggtt	2880
tcaagatgtg	ggcgtgtttg	tgcatatatg	tgttggtatg	catgtggaag	aatgtgtgtg	2940
tgtgtgtgtg	tgtgttgtaa	ctttcctgtc	tctatcacgt	cttcccttgg	cctgggggtcc	3000
tcctggttga	gtcttttgag	ctatgaaggg	gaaggggggtc	atagcacttt	gcttctccta	3060
ccccagctg	tcccaagctt	tggggcagtg	atgtacatac	ggggaaggga	aggacagggt	3120
gttgtacccc	ttttggggga	gtgcgggact	cgggggtggg	cctagccctg	ctcctagggc	3180
tgtgaatggt	ttcagggcgg	gggttggggg	tggagatgga	acctcctgct	tcagggggag	3240
gggtgggcag	ggcctcccac	ttgccctccg	ggttcgggtg	tattttatat	ttgcgctctt	3300
ctgacagggc	tgggaagggt	tgttggggga	gggaaggggag	gaggtgggca	tgctatggat	3360
actggcctat	cctctccctg	ctctgggaaa	agggctaaca	gtgtaactta	ttgtgtcccc	3420
acatatttat	ttgttgtaaa	tatttgagta	tttttatatt	gacaaataaa	atggagaaaa	3480
tgaattttaa	aaaaaaaaaa	aaa				3503

<210> 337

<220>

<223> Unknown

<400> 337

000

<210> 338

<220>

<223> Unknown

<400> 338.

000

<210> 339

<211> 348

<212> PRT

<213> Cricetulus griseus

<400> 339

```
Met His Leu Pro Pro Ala Ala Ala Val Gly Leu Leu Leu Leu Leu Leu
 1          5          10          15
Pro Pro Pro Ala Arg Val Ala Ser Arg Lys Pro Thr Met Cys Gln Arg
 20          25          30
Cys Arg Ala Leu Val Asp Lys Phe Asn Gln Gly Met Ala Asn Thr Ala
 35          40          45
Arg Lys Asn Phe Gly Gly Gly Asn Thr Ala Trp Glu Glu Lys Ser Leu
 50          55          60
Ser Lys Tyr Glu Phe Ser Glu Ile Arg Leu Leu Glu Ile Met Glu Gly
 65          70          75          80
Leu Cys Asp Ser Asn Asp Phe Glu Cys Asn Gln Leu Leu Glu Gln His
 85          90          95
Glu Glu Gln Leu Glu Ala Trp Trp Gln Thr Leu Lys Lys Glu Cys Pro
100          105          110
Asn Leu Phe Glu Trp Phe Cys Val His Thr Leu Lys Ala Cys Cys Leu
115          120          125
Pro Gly Thr Tyr Gly Pro Asp Cys Gln Glu Cys Gln Gly Gly Ser Gln
130          135          140
Arg Pro Cys Ser Gly Asn Gly His Cys Asp Gly Asp Gly Ser Arg Gln
145          150          155          160
Gly Asp Gly Ser Cys Gln Cys His Val Gly Tyr Lys Gly Pro Leu Cys
165          170          175
Ile Asp Cys Met Asp Gly Tyr Phe Ser Leu Leu Arg Asn Glu Thr His
180          185          190
Ser Phe Cys Thr Ala Cys Asp Glu Ser Cys Lys Thr Cys Ser Gly Pro
195          200          205
Thr Asn Lys Gly Cys Val Glu Cys Glu Val Gly Trp Thr Arg Val Glu
210          215          220
Asp Ala Cys Val Asp Val Asp Glu Cys Ala Ala Glu Thr Pro Pro Cys
225          230          235          240
Ser Asn Val Gln Tyr Cys Glu Asn Val Asn Gly Ser Tyr Thr Cys Glu
245          250          255
Glu Cys Asp Ser Thr Cys Val Gly Cys Thr Gly Lys Gly Pro Ala Asn
260          265          270
Cys Lys Glu Cys Ile Ser Gly Tyr Ser Lys Gln Lys Gly Glu Cys Ala
275          280          285
Asp Ile Asp Glu Cys Ser Leu Glu Thr Lys Val Cys Lys Lys Glu Asn
290          295          300
Glu Asn Cys Tyr Asn Thr Pro Gly Ser Phe Val Cys Val Cys Pro Glu
305          310          315          320
Gly Phe Glu Glu Asp Arg Arg Cys Leu Cys Thr Asp Ser Arg Arg Arg
325          330          335
Ser Gly Arg Gly Lys Ser His Thr Ala Thr Leu Pro
340          345
```

<210> 340

<211> 1399

<212> DNA

<213> Cricetulus griseus

<400> 340

```
gtagccggggg gaacggccgg cgcgcttgcc ggtggggcgga ggcgagactc cacagcagtt 60
ctctgccggt cgcccgcgag tgcacccgcc atgcacctgc cgcccgctgc cgcagtcggg 120
```

```

ctgctactgc tgctgctgcc gcctcccgcg cgcgtggcct cccggaagcc gacaatgtgc 180
cagaggtgcc gggcgctggt ggacaagttc aaccagggga tggccaacac ggccaggaag 240
aatttcggcg gcggaacac ggcgtgggag gagaagagtc tgtccaagta cgaattcagt 300
gagattcggc tcctggagat tatggagggc ctgtgtgaca gcaacgactt tgaatgcaac 360
caactcttgg aacagcatga ggagcagcta gaggcctggt ggcagacact gaagaaggag 420
tgccctaacc tatttgagtg gttctgtgta cacacactga aagcatgctg tcttccaggc 480
acctatgggc cagactgtca ggaatgccag ggtgggtctc agaggccttg tagcgggaat 540
ggccactgcg acggagatgg cagcagacag ggcgacgggt cctgccagtg tcacgtagga 600
tacaaggggc cgctgtgtat cgactgcatg gatggctact tcagcttgct gaggaacgag 660
acccacagct tctgcacagc ctgtgatgag tcctgcaaga catgctcagg tccaaccaac 720
aaaggctgtg tggagtgcga agtgggctgg acacgtgtgg aggatgcctg tgtggatgtt 780
gacgagtgtg cagcagagac cccaccctgc agcaatgtac agtactgtga aaatgtcaac 840
ggctcctaca catgtgaaga gtgtgattct acctgtgtgg gctgcacagg aaaaggccca 900
gccaatgtga aagagtgtat ctctggctac agcaagcaga aaggagagtg tgcagatata 960
gatgaatgct cattagaaac aaagggtgtg aagaaggaaa atgagaactg ctacaatact 1020
ccagggagct ttgtctgcgt gtgtccgga ggtttcgagg aagacagaag atgcttgtgt 1080
acagacagca gaaggcgaag tggcagagga aagtcccaca cagccaccct cccatgagga 1140
tttgtgacgg gcatccaggt tcagaagctg gactctcacc cttttaagtt attgagagga 1200
catcctatag aaaatgtggc ccatggacat caaccccatt tctccaggaa gttttggagg 1260
aagaagctgc ctgctttgaa acagtagata ctcacttggc cctttaaaac gctgcatttc 1320
ttggtggttc ttaaacagat tcgtatattt tgatactgtt ctttataata aaattgatca 1380
ttgaaggtca ccaggaaca 1399

```

```

<210> 341
<211> 528
<212> PRT
<213> Homo sapiens

```

```

<400> 341
Met Ala Gln Leu Phe Leu Pro Leu Leu Ala Ala Leu Val Leu Ala Gln
1 5 10 15
Ala Pro Ala Ala Leu Ala Asp Val Leu Glu Gly Asp Ser Ser Glu Asp
20 25 30
Arg Ala Phe Arg Val Arg Ile Ala Gly Asp Ala Pro Leu Gln Gly Val
35 40 45
Leu Gly Gly Ala Leu Thr Ile Pro Cys His Val His Tyr Leu Arg Pro
50 55 60
Pro Pro Ser Arg Arg Ala Val Leu Gly Ser Pro Arg Val Lys Trp Thr
65 70 75 80
Phe Leu Ser Arg Gly Arg Glu Ala Glu Val Leu Val Ala Arg Gly Val
85 90 95
Arg Val Lys Val Asn Glu Ala Tyr Arg Phe Arg Val Ala Leu Pro Ala
100 105 110
Tyr Pro Ala Ser Leu Thr Asp Val Ser Leu Ala Leu Ser Glu Leu Arg
115 120 125
Pro Asn Asp Ser Gly Ile Tyr Arg Cys Glu Val Gln His Gly Ile Asp
130 135 140
Asp Ser Ser Asp Ala Val Glu Ser Ser Gln Arg Tyr Pro Ile Gln Thr
145 150 155 160
Pro Arg Glu Ala Cys Tyr Gly Asp Met Asp Gly Phe Pro Gly Val Arg
165 170 175
Asn Tyr Gly Val Val Asp Pro Asp Asp Leu Tyr Asp Val Tyr Cys Tyr
180 185 190
Ala Glu Asp Leu Asn Gly Glu Leu Phe Leu Gly Asp Pro Pro Glu Lys
195 200 205
Leu Thr Leu Glu Glu Ala Arg Ala Tyr Cys Gln Glu Arg Gly Ala Glu
210 215 220

```

Ile	Ala	Thr	Thr	Gly	Gln	Leu	Tyr	Ala	Ala	Trp	Asp	Gly	Gly	Leu	Asp
225					230					235					240
His	Cys	Ser	Pro	Gly	Trp	Leu	Ala	Asp	Gly	Ser	Val	Arg	Tyr	Pro	Ile
				245					250					255	
Val	Thr	Pro	Ser	Gln	Arg	Cys	Gly	Gly	Gly	Leu	Pro	Gly	Val	Lys	Thr
			260					265					270		
Leu	Phe	Leu	Phe	Pro	Asn	Gln	Thr	Gly	Phe	Pro	Asn	Lys	His	Ser	Arg
		275					280					285			
Phe	Asn	Val	Tyr	Cys	Phe	Arg	Asp	Ser	Ala	Gln	Leu	Leu	Pro	Ser	Leu
	290					295					300				
Arg	Pro	Pro	Thr	Gln	Pro	Pro	Thr	Gln	Leu	Asp	Gly	Leu	Glu	Ala	Ile
305					310					315					320
Val	Thr	Val	Thr	Glu	Thr	Leu	Glu	Glu	Leu	Gln	Leu	Pro	Gln	Glu	Ala
				325					330					335	
Thr	Glu	Ser	Glu	Ser	Arg	Gly	Ala	Ile	Tyr	Ser	Ile	Pro	Ile	Met	Glu
			340					345					350		
Asp	Gly	Gly	Gly	Gly	Ser	Ser	Thr	Pro	Glu	Asp	Pro	Ala	Glu	Ala	Pro
		355					360					365			
Arg	Thr	Leu	Leu	Glu	Phe	Glu	Thr	Gln	Ser	Met	Val	Pro	Pro	Thr	Gly
	370					375				380					
Phe	Ser	Glu	Glu	Glu	Gly	Lys	Ala	Leu	Glu	Glu	Glu	Glu	Lys	Tyr	Glu
385					390					395					400
Asp	Glu	Glu	Glu	Lys	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Val	Glu	Asp
				405				410						415	
Glu	Ala	Leu	Trp	Ala	Trp	Pro	Ser	Glu	Leu	Ser	Ser	Pro	Gly	Pro	Glu
		420						425					430		
Ala	Ser	Leu	Pro	Thr	Glu	Pro	Ala	Ala	Gln	Glu	Glu	Ser	Leu	Ser	Gln
		435					440					445			
Ala	Pro	Ala	Arg	Ala	Val	Leu	Gln	Pro	Gly	Ala	Ser	Pro	Leu	Pro	Asp
	450					455					460				
Gly	Glu	Ser	Glu	Ala	Ser	Arg	Pro	Pro	Arg	Val	His	Gly	Pro	Pro	Thr
465					470					475					480
Glu	Thr	Leu	Pro	Thr	Pro	Arg	Glu	Arg	Asn	Leu	Ala	Ser	Pro	Ser	Pro
				485					490					495	
Ser	Thr	Leu	Val	Glu	Ala	Arg	Glu	Val	Gly	Glu	Ala	Thr	Gly	Gly	Pro
			500					505					510		
Glu	Leu	Ser	Gly	Val	Pro	Arg	Gly	Gly	Ala	Arg	Thr	Gln	Phe	Ala	Leu
		515					520					525			

<210> 342
 <211> 883
 <212> PRT
 <213> Mus sp.

<400> 342
 Met Ile Pro Leu Leu Leu Ser Leu Leu Ala Ala Leu Val Leu Thr Gln
 1 5 10 15
 Ala Pro Ala Ala Leu Ala Asp Asp Leu Lys Glu Asp Ser Ser Glu Asp
 20 25 30
 Arg Ala Phe Arg Val Arg Ile Gly Ala Ala Gln Leu Arg Gly Val Leu
 35 40 45
 Gly Gly Ala Leu Ala Ile Pro Cys His Val His His Leu Arg Pro Pro
 50 55 60
 Arg Ser Arg Arg Ala Ala Pro Gly Phe Pro Arg Val Lys Trp Thr Phe
 65 70 75 80
 Leu Ser Gly Asp Arg Glu Val Glu Val Leu Val Ala Arg Gly Leu Arg

Gly	Ser	Pro	Glu	Leu	Ser	Gly	Val	Pro	Arg	Glu	Ser	Glu	Glu	Ala	Gly
545					550					555					560
Ser	Ser	Ser	Leu	Glu	Asp	Gly	Pro	Ser	Leu	Leu	Pro	Ala	Thr	Trp	Ala
			565						570						575
Pro	Val	Gly	Pro	Arg	Glu	Leu	Glu	Thr	Pro	Ser	Glu	Glu	Lys	Ser	Gly
			580					585					590		
Arg	Thr	Val	Leu	Ala	Gly	Thr	Ser	Val	Gln	Ala	Gln	Pro	Val	Leu	Pro
		595				600						605			
Thr	Asp	Ser	Ala	Ser	His	Gly	Gly	Val	Ala	Val	Ala	Pro	Ser	Ser	Gly
	610					615					620				
Asp	Cys	Ile	Pro	Ser	Pro	Cys	His	Asn	Gly	Gly	Thr	Cys	Leu	Glu	Glu
625					630					635					640
Lys	Glu	Gly	Phe	Arg	Cys	Leu	Cys	Leu	Pro	Gly	Tyr	Gly	Gly	Asp	Leu
			645						650						655
Cys	Asp	Val	Gly	Leu	His	Phe	Cys	Ser	Pro	Gly	Trp	Glu	Ala	Phe	Gln
			660					665						670	
Gly	Ala	Cys	Tyr	Lys	His	Phe	Ser	Thr	Arg	Arg	Ser	Trp	Glu	Glu	Ala
		675					680					685			
Glu	Ser	Gln	Cys	Arg	Ala	Leu	Gly	Ala	His	Leu	Thr	Ser	Ile	Cys	Thr
	690					695					700				
Pro	Glu	Glu	Gln	Asp	Phe	Val	Asn	Asp	Arg	Tyr	Arg	Glu	Tyr	Gln	Trp
705					710					715					720
Ile	Gly	Leu	Asn	Asp	Arg	Thr	Ile	Glu	Gly	Asp	Phe	Leu	Trp	Ser	Asp
			725						730						735
Gly	Ala	Pro	Leu	Leu	Tyr	Glu	Asn	Trp	Asn	Pro	Gly	Gln	Pro	Asp	Ser
			740					745					750		
Tyr	Phe	Leu	Ser	Gly	Glu	Asn	Cys	Val	Val	Met	Val	Trp	His	Asp	Gln
		755					760					765			
Gly	Gln	Trp	Ser	Asp	Val	Pro	Cys	Asn	Tyr	His	Leu	Ser	Tyr	Thr	Cys
	770					775					780				
Lys	Met	Gly	Leu	Val	Ser	Cys	Gly	Pro	Pro	Pro	Gln	Leu	Pro	Leu	Ala
785					790					795					800
Gln	Ile	Phe	Gly	Arg	Pro	Arg	Leu	Arg	Tyr	Ala	Val	Asp	Thr	Val	Leu
			805						810						815
Arg	Tyr	Arg	Cys	Arg	Asp	Gly	Leu	Ala	Gln	Arg	Asn	Leu	Pro	Leu	Ile
			820					825					830		
Arg	Cys	Gln	Glu	Asn	Gly	Leu	Trp	Glu	Ala	Pro	Gln	Ile	Ser	Cys	Val
		835					840					845			
Pro	Arg	Arg	Pro	Gly	Arg	Ala	Leu	Arg	Ser	Met	Asp	Ala	Pro	Glu	Gly
	850					855					860				
Pro	Arg	Gly	Gln	Leu	Ser	Arg	His	Arg	Lys	Ala	Pro	Leu	Thr	Pro	Pro
865					870					875					880
Ser	Ser	Leu													

<210> 343
 <211> 3153
 <212> DNA
 <213> Mus sp.

<220>
 <221> misc_feature
 <222> (1)...(3153)
 <223> n = A,T,C or G

<400> 343

gaggctcccc	gcgagctggc	gcccctgtct	gggtccccgc	cgccccggccc	tgctcgcgcc	60
cgcgcatcgc	gcccgcagtct	cggtctgcgg	ctgcgggacg	tgacggcgctg	cgcgaggagg	120
acctcgcaag	ttcttccatc	agtgtgcaga	atgataccac	tgcttctgtc	cctgctggcc	180
gctctgggtcc	tgacccaagc	ccctgccgcc	ctcgtgatg	acctgaaaga	agacagctcg	240
gaggatcgag	ccttccgcgt	gcgcacccgt	gccgcgcagc	tgccggggcgt	gctggggcgt	300
gccctggcca	tcccatgccca	cgtccaccac	ctgcggccgc	cgcgagcccg	ccggggccgcg	360
ccgggttttc	cccgggtcaa	gtggaccttc	ctgtccgggg	accgggaggt	agagggttctg	420
gtggctcgcg	ggctgcgcgt	caaggtaaac	gaagcctacc	ggttccgcgt	ggcgctgcct	480
gcctaccccc	catcgtcac	ggatgtgtct	ctagtattga	gcgaactgcg	gccaatgat	540
tccgggggtct	atcgtcgcga	ggtccagcac	ggtatcgacg	acagcagtga	tgctgtggag	600
gtcaagggtca	aaggggtcgt	cttcctctac	agagagggtct	ctgcgcgcta	tgctttctcc	660
ttcgctggag	cccaggaagc	ctgcgctcgc	ataggagccc	gaatcgccac	cccggagcag	720
ctctatgctg	cctacctcgg	cggctatgag	cagtgtgatg	caggctggct	gtccgaccaa	780
actgtgaggt	acccccacca	gaaccacga	gaggcctgct	ctggagacat	ggatggctat	840
cctggcgtgc	ggaactacgg	agtgggtgggt	cctgatgatc	tctatgatgt	ctactgttat	900
gccgaagacc	taaattggaga	actgttcccta	ggcgccttc	ccagcaagct	gacatgggag	960
gaggctcggg	actactgtct	ggaacgtgggt	gcacagatcg	ctagcacagg	ccagctgtac	1020
gcagcctgga	atggtggcct	ggacagatgt	agccctggct	ggctggctga	tgccagcgtg	1080
cgctatccca	tcatcacacc	cagccaacgc	tgtgggggcg	gcctgccagg	agtcaagacc	1140
ctcttctctt	ttcccaacca	gactggcttc	cccagcaagc	agaaccgctt	caatgtctac	1200
tgcttccgag	actctgccc	tccctctgct	tcctctgagg	cctctagccc	agcctcagat	1260
ggacttgagg	ccattgtcac	agtgcagaa	aagctggagg	aactgcagct	gcctcaggaa	1320
gcgattggaga	gcgagctcgc	tggggccatc	tactccatcc	ccatctcaga	agatggggga	1380
ggaggaaagct	agaccccgca	gagggcccca	ggactccgct	agaatcgga	1440	
acccaatcca	ttgcaccacc	taccgagtcc	tcagaagagg	aaggcgtagc	cctggaggaa	1500
gaagaaagat	tcaaagactt	ggaggctctg	gaggaagaga	aggagcagga	ggacctgtgg	1560
gtgtggccca	gagagctcag	cagccctctc	cctactggct	cagaaacaga	gcattcactc	1620
tcccagggtgt	ccccaccagc	ccaggcagtt	ctacagctgg	atgcgtcacc	ttctcctggg	1680
cctccaaggt	tccgtggacc	gcctgcagag	actttgtctc	ccccgaggga	gtggagcgcc	1740
acatctactc	ctggtggggc	aagagaagta	gggggggaaa	ctgggagccc	tgagctctct	1800
gggggttctc	gagagagcga	ggaggcaggg	agctccagct	tggaggatgg	cccttcccta	1860
cttccagcta	catggggccc	tgtgggtccc	agggagctgg	agacccctc	agaagagaag	1920
tctggaagaa	ctgtcctggc	aggcacctca	gtgcaggccc	agccagtgtc	gcccaccgac	1980
agtgccagcc	acgggtggagt	ggctgtggct	ccctcatcag	gtgactgtat	ccccagcccc	2040
tgccacaatg	gtgggacatg	cttgaggagg	aaggagggtt	tccgctgcct	atgtttgcca	2100
ggctatgggg	gggacctgtg	cgatgttggc	cttcatttct	gcagccctgg	ctgggaggcc	2160
ttccaggggag	cctgctacaa	gcacttttcc	acacgaagga	gttgggagga	ggcagaaagt	2220
cagtgcgcgag	cgctaggtgc	tcatctgacc	agcatctgca	cccctgagga	gcaagacttt	2280
gtcaatgatc	gataccggga	gtaccagtgg	attgggtcca	atgacaggac	catcgagggt	2340
gacttcttgt	ggtcagatgg	tgccctctg	ctctatgaaa	actggaacct	tgggcagcct	2400
gacagctact	tcctgtctgg	ggagaactgt	gtggctcatg	tgtggcatga	ccagggacag	2460
tggagtgatg	tgcctgcaa	ctaccatcta	tcctacacct	gcaagatggg	gcttgtgtcc	2520
tgtgggcctc	caccacagct	acccctggct	caaataattt	gtcgccctcg	gctgcgctac	2580
gcggtggata	ctgtgcttcg	atatcgatgc	cgagacgggc	tggctcagcg	caacctgccg	2640
ttgatccgct	gccaggagaa	tgggcttttg	gaggccctc	agatttctct	tgtaccccg	2700
aggcctggcc	gtgctctgcg	ctccatggac	gccccagaag	gaccacgggg	acagctctcg	2760
aggcacagga	aggcaccgtt	gacaccgccc	tccagtctct	agggagcctg	gaagactgct	2820
gccccagca	ggaccctctc	acatcaactg	ccagtgtctc	tccccatgat	agggggtgac	2880
gtgagagggg	tgggactgaa	attcagagga	cagcgtctga	aggggtttct	gggaaacact	2940
tgggtggctc	cgccccctca	cacaagggcc	tcagggttta	cccggtaagt	ccctaagtgc	3000
ctcaactgcc	ctctcatgtc	agctgcctcc	ttgtccctcg	atntcgtnag	gggacactgt	3060
gctattcgat	cttgattgtc	gaagagtttt	taggatggag	taccagcaaa	accagggtgga	3120
aataaagttg	tctgaaccga	aagaaaaaaa	aaa			3153

<210> 344

<220>

<223> Unknown

<400> 344
000

<210> 345

<220>

<223> Unknown

<400> 345
000

<210> 346

<220>

<223> Unknown

<400> 346
000

<210> 347

<220>

<223> Unknown

<400> 347
000

<210> 348

<220>

<223> Unknown

<400> 348
000

<210> 349

<220>

<223> Unknown

<400> 349
000

<210> 350

<220>

<223> Unknown

<400> 350
000

<210> 351

<211> 2002

<212> DNA

<213> Gerbil

<400> 351

gtcgacccac	gcgtccgctg	cgttctcacc	cctgggaccac	cctggggagaa	cagttgaccg	60
aagtttgttt	ggcagttgct	gctggactat	gtttctgctt	ctggtggtac	tcagccagct	120
gcccagactt	accctcgcgg	ttcctcatat	aagaagccta	aagaattctg	aacatgcccc	180
agaaggagtc	tttgcacaa	aaaaagcagc	aagcatcttt	atgcaccgtc	gcctcctata	240
caatagattt	gatttagaac	tcttcactcc	cgggaacctg	gagagagagt	gctatgagga	300
gttctgtagt	tatgaagaag	ccagagagat	cctcggggac	aacgaagaaa	tgatcacatt	360
ctggcgggaa	tattcagtc	aaggaccaac	cacaagatca	gatgtcaaca	aagagaaaaat	420
tgatgttatg	ggccttctga	ctggcttaat	tgcggtctga	gtattcttgg	ttgtttttgg	480
cttacttggt	tactatctgt	gtatcaccaa	gtgtaatagg	cagccatatc	aaggttcttc	540
agctgtctac	acaagaagga	ccaggcacac	accgtccatc	attttcagaa	cccatgagga	600
agctgtcttg	tctccatcgt	catcctcaga	ggacgcggga	ctaccttcct	atgaacaggc	660
agtagctctg	accagaaaaa	acagtgtctc	accaccacct	ccatactctg	ggccagcaaa	720
aggatttagg	gtatttaaaa	agtcaatgtc	actcccatct	cactaagccc	accttgccgc	780
cttgctgtgg	tctgaataat	atgttcttcc	tgaacaaca	acaacaaaaa	aatttgccctg	840
ttcagctttt	tatgacaaag	cacaaggaat	aaaggaacac	tatatacaga	acagaattca	900
ccacagcccc	gctttcagct	ctgcccccaa	ctggattgct	gtcttggtta	gagacttcta	960
ccgtgcttcc	tcgaagttaa	gaagaaagtg	cctttttgca	atgtaaactg	tactgggttc	1020
aacattcttg	ctacagctag	gtacctataa	tccccacctt	caggagactt	aggcgggagg	1080
gatgagagtt	caaggccagc	ctgggcccctg	tcaggacgct	gtctcaaaac	aaagtttgtt	1140
atcaatagaa	taattagaat	taacaaacta	ggatttttcag	tcttaagtca	tgatattgga	1200
tcttctcttc	agtaaggttt	ctttttggct	agaaataact	catagaattt	gacatttttg	1260
tatacatctg	tggccttgat	acaatgactt	gattttctgt	tttaattagt	gcagaggatt	1320
cagcaaat	gcaggctctt	attttggtcc	ctcgctatcc	atcgatcatg	tttcagtgt	1380
ttaagaggag	tcagccaggc	gtggtggccc	acacctgtga	tcccagcact	taggggggca	1440
taggcaggca	gatctctgtg	agctgaagga	cagcctggcc	tacaaagtcc	aggacaaccg	1500
agaccacaca	gagaaacctt	gtcttgaaaa	acaaaacaaa	aacaagagag	agagagagag	1560
agagagaaaa	gagatgtcaa	gagggtttttg	tttttttttt	tttaaattac	tatttatggg	1620
cctcacttgg	aaaagtgtt	gccatgcaaa	tagaaggaca	ggagttcaat	cctcattacc	1680
cacatttgaa	acaaataaca	agaaaaacaa	acaaaaaac	caaaacaaac	aaaatcttga	1740
gaacttgagt	gaataccggt	aacctcaggg	ctaggcactg	taactgaatc	aggagcctcc	1800
agatccaggg	aaacgctgtc	tcaacaaata	aataaataag	taagtcagt	aggtggtctt	1860
taaaccagc	acttgagagc	caaaggcagg	cagagctcag	tgagttggag	accagcctgg	1920
tctacaaagc	aagttctaag	ggagccaggg	cacagagaaa	ccctgtctga	aggaaaaaaa	1980
aaaaaaaaaa	aagggcggcc	gc				2002

<210> 352
 <211> 675
 <212> DNA
 <213> Gerbil

<400> 352

atgtttctgc	ttctgggtgg	actcagccag	ctgcccagac	ttaccctcgc	ggttcctcat	60
acaagaagcc	taaagaattc	tgaacatgcc	ccagaaggag	tctttgcatc	aaaaaaagca	120
gcaagcatct	ttatgcaccg	tcgcctccta	tacaatagat	ttgatttaga	actcttcact	180
cccgggaacc	tggagagaga	gtgctatgag	gagttctgta	gttatgaaga	agccagagag	240
atcctcgggg	acaacgaaga	aatgatcaca	ttctggcggg	aatattcagt	caaaggacca	300
accacaagat	cagatgtcaa	caaagagaaa	attgatgtta	tgggccttct	gactggctta	360
attcggtctg	gagtattctt	ggttggtttt	ggcttacttg	gttactatct	gtgtatcacc	420
aagtgttaata	ggcagccata	tcaaggttct	tcagctgtct	acacaagaag	gaccaggcac	480
acaccgtcca	tcattttcag	aacctatgag	gaagctgtct	tgtctccatc	gtcatcctca	540
gaggacgcgg	gactaccttc	ctatgaacag	gcagtagctc	tgaccagaaa	acacagtgtc	600
tcaccaccac	ctccatatcc	tgggcccagca	aaaggattta	gggtatttaa	aaagtcaatg	660
tcactcccat	ctcac					675

<210> 353

<211> 225
 <212> PRT
 <213> Gerbil

<400> 353

Met	Phe	Leu	Leu	Leu	Val	Val	Leu	Ser	Gln	Leu	Pro	Arg	Leu	Thr	Leu
1				5					10					15	
Ala	Val	Pro	His	Thr	Arg	Ser	Leu	Lys	Asn	Ser	Glu	His	Ala	Pro	Glu
			20					25					30		
Gly	Val	Phe	Ala	Ser	Lys	Lys	Ala	Ala	Ser	Ile	Phe	Met	His	Arg	Arg
		35					40					45			
Leu	Leu	Tyr	Asn	Arg	Phe	Asp	Leu	Glu	Leu	Phe	Thr	Pro	Gly	Asn	Leu
	50					55					60				
Glu	Arg	Glu	Cys	Tyr	Glu	Glu	Phe	Cys	Ser	Tyr	Glu	Glu	Ala	Arg	Glu
65					70					75					80
Ile	Leu	Gly	Asp	Asn	Glu	Glu	Met	Ile	Thr	Phe	Trp	Arg	Glu	Tyr	Ser
			85						90					95	
Val	Lys	Gly	Pro	Thr	Thr	Arg	Ser	Asp	Val	Asn	Lys	Glu	Lys	Ile	Asp
			100					105					110		
Val	Met	Gly	Leu	Leu	Thr	Gly	Leu	Ile	Ala	Ala	Gly	Val	Phe	Leu	Val
	115						120					125			
Val	Phe	Gly	Leu	Leu	Gly	Tyr	Tyr	Leu	Cys	Ile	Thr	Lys	Cys	Asn	Arg
	130					135					140				
Gln	Pro	Tyr	Gln	Gly	Ser	Ser	Ala	Val	Tyr	Thr	Arg	Arg	Thr	Arg	His
145					150					155					160
Thr	Pro	Ser	Ile	Ile	Phe	Arg	Thr	His	Glu	Glu	Ala	Val	Leu	Ser	Pro
			165						170					175	
Ser	Ser	Ser	Ser	Glu	Asp	Ala	Gly	Leu	Pro	Ser	Tyr	Glu	Gln	Ala	Val
			180				185						190		
Ala	Leu	Thr	Arg	Lys	His	Ser	Val	Ser	Pro	Pro	Pro	Pro	Tyr	Pro	Gly
	195						200					205			
Pro	Ala	Lys	Gly	Phe	Arg	Val	Phe	Lys	Lys	Ser	Met	Ser	Leu	Pro	Ser
	210					215					220				

His
 225

<210> 354
 <211> 17
 <212> PRT
 <213> Gerbil

<400> 354

Met	Phe	Leu	Leu	Leu	Val	Val	Leu	Ser	Gln	Leu	Pro	Arg	Leu	Thr	Leu
1				5					10					15	

Ala

<210> 355
 <211> 208
 <212> PRT
 <213> Gerbil

<400> 355

Val	Pro	His	Thr	Arg	Ser	Leu	Lys	Asn	Ser	Glu	His	Ala	Pro	Glu	Gly
1				5					10					15	

Val	Phe	Ala	Ser	Lys	Lys	Ala	Ala	Ser	Ile	Phe	Met	His	Arg	Arg	Leu
			20					25					30		
Leu	Tyr	Asn	Arg	Phe	Asp	Leu	Glu	Leu	Phe	Thr	Pro	Gly	Asn	Leu	Glu
		35					40					45			
Arg	Glu	Cys	Tyr	Glu	Glu	Phe	Cys	Ser	Tyr	Glu	Glu	Ala	Arg	Glu	Ile
	50					55				60					
Leu	Gly	Asp	Asn	Glu	Glu	Met	Ile	Thr	Phe	Trp	Arg	Glu	Tyr	Ser	Val
65				70					75						80
Lys	Gly	Pro	Thr	Thr	Arg	Ser	Asp	Val	Asn	Lys	Glu	Lys	Ile	Asp	Val
				85				90						95	
Met	Gly	Leu	Leu	Thr	Gly	Leu	Ile	Ala	Ala	Gly	Val	Phe	Leu	Val	Val
			100					105					110		
Phe	Gly	Leu	Leu	Gly	Tyr	Tyr	Leu	Cys	Ile	Thr	Lys	Cys	Asn	Arg	Gln
		115					120					125			
Pro	Tyr	Gln	Gly	Ser	Ser	Ala	Val	Tyr	Thr	Arg	Arg	Thr	Arg	His	Thr
		130				135					140				
Pro	Ser	Ile	Ile	Phe	Arg	Thr	His	Glu	Glu	Ala	Val	Leu	Ser	Pro	Ser
145					150					155					160
Ser	Ser	Ser	Glu	Asp	Ala	Gly	Leu	Pro	Ser	Tyr	Glu	Gln	Ala	Val	Ala
				165				170						175	
Leu	Thr	Arg	Lys	His	Ser	Val	Ser	Pro	Pro	Pro	Pro	Tyr	Pro	Gly	Pro
			180					185					190		
Ala	Lys	Gly	Phe	Arg	Val	Phe	Lys	Lys	Ser	Met	Ser	Leu	Pro	Ser	His
		195					200					205			

<210> 356
 <211> 95
 <212> PRT
 <213> Gerbil

<400> 356

Val	Pro	His	Thr	Arg	Ser	Leu	Lys	Asn	Ser	Glu	His	Ala	Pro	Glu	Gly
1				5					10					15	
Val	Phe	Ala	Ser	Lys	Lys	Ala	Ala	Ser	Ile	Phe	Met	His	Arg	Arg	Leu
			20					25					30		
Leu	Tyr	Asn	Arg	Phe	Asp	Leu	Glu	Leu	Phe	Thr	Pro	Gly	Asn	Leu	Glu
		35					40					45			
Arg	Glu	Cys	Tyr	Glu	Glu	Phe	Cys	Ser	Tyr	Glu	Glu	Ala	Arg	Glu	Ile
	50					55				60					
Leu	Gly	Asp	Asn	Glu	Glu	Met	Ile	Thr	Phe	Trp	Arg	Glu	Tyr	Ser	Val
65				70					75						80
Lys	Gly	Pro	Thr	Thr	Arg	Ser	Asp	Val	Asn	Lys	Glu	Lys	Ile	Asp	
				85				90						95	

<210> 357
 <211> 25
 <212> PRT
 <213> Gerbil

<400> 357

Val	Met	Gly	Leu	Leu	Thr	Gly	Leu	Ile	Ala	Ala	Gly	Val	Phe	Leu	Val
1				5					10					15	
Val	Phe	Gly	Leu	Leu	Gly	Tyr	Tyr	Leu							
			20					25							

<210> 358
 <211> 88
 <212> PRT
 <213> Gerbil

<400> 358
 Cys Ile Thr Lys Cys Asn Arg Gln Pro Tyr Gln Gly Ser Ser Ala Val
 1 5 10 15
 Tyr Thr Arg Arg Thr Arg His Thr Pro Ser Ile Ile Phe Arg Thr His
 20 25 30
 Glu Glu Ala Val Leu Ser Pro Ser Ser Ser Glu Asp Ala Gly Leu
 35 40 45
 Pro Ser Tyr Glu Gln Ala Val Ala Leu Thr Arg Lys His Ser Val Ser
 50 55 60
 Pro Pro Pro Pro Tyr Pro Gly Pro Ala Lys Gly Phe Arg Val Phe Lys
 65 70 75 80
 Lys Ser Met Ser Leu Pro Ser His
 85

<210> 359
 <220>
 <223> Unknown

<400> 359
 000

<210> 360
 <220>
 <223> Unknown

<400> 360
 000

<210> 361
 <220>
 <223> Unknown

<400> 361
 000

<210> 362
 <211> 962
 <212> DNA
 <213> Mus sp.

<400> 362
 ccgtttctct ttaaccactt gcacgggtctg gggttaaccc gcctgcggac tctggacctc 60
 tcttccaact ggctgaaaca tatctccatc cctgagttgg ctgcactgcc aacttatctc 120
 aagaacaggc tctacctgca caacaacccg ctgccctgtg actgcagcct ctaccacctg 180
 ctccggcgct ggcaccagcg gggcctgagt gccctgcatg attttgaacg cgagtacaca 240
 tgcttggtct ttaaggtgtc agagtcccga gtgcgctttt ttgagcacag ccgggtcttc 300
 aagaactgct ctgtggctgc agctccaggc ttagagctgc ctgaagagca gctgcacgcg 360

```

caggtggggcc agtccctgag gctcttctgc aacaccagtg tgcctgccac tcgggtggcc 420
tggtgtctccc cgaagaatga gctgcttgtg gcgccagcct ctcaggatgg tagcatcgct 480
gtgttggtctg atggcagctt agccataggc aggggtgcaag agcagcacgc aggcgtcttt 540
gtgtgcctgg ccagtggggc ccgcctgcac cacaaccaga cacttgagta caatgtgagt 600
gtgcaaaagg ctgccccga gccagagact ttcaacacag gctttaccac cctgctgggc 660
tgtattgtgg gcctggtgct ggtgttgctc tacttgtttg caccaccctg tcgtggctgc 720
tgtcactgct gtcagcgggc ctgccgcaac cgttgctggc cccgggcatc cagtccactc 780
caggagctga ggcacagtc ctccatgctt agcactacgc caccagatgc acccagccgc 840
aaggccagtg tccacaagca tgtgtcttcc ctggagccgg gcaagaaggg cctcaatggc 900
cgtgtgcagc tcgcagtacc tccagactcc gatctgtgca accccatggg cttgcaactc 960
aa

```

<210> 363
 <211> 320
 <212> PRT
 <213> Mus sp.

<400> 363

```

Pro Phe Leu Phe Asn His Leu His Gly Leu Gly Leu Thr Arg Leu Arg
 1          5          10          15
Thr Leu Asp Leu Ser Ser Asn Trp Leu Lys His Ile Ser Ile Pro Glu
 20          25          30
Leu Ala Ala Leu Pro Thr Tyr Leu Lys Asn Arg Leu Tyr Leu His Asn
 35          40          45
Asn Pro Leu Pro Cys Asp Cys Ser Leu Tyr His Leu Leu Arg Arg Trp
 50          55          60
His Gln Arg Gly Leu Ser Ala Leu His Asp Phe Glu Arg Glu Tyr Thr
 65          70          75          80
Cys Leu Val Phe Lys Val Ser Glu Ser Arg Val Arg Phe Phe Glu His
 85          90          95
Ser Arg Val Phe Lys Asn Cys Ser Val Ala Ala Ala Pro Gly Leu Glu
100          105          110
Leu Pro Glu Glu Gln Leu His Ala Gln Val Gly Gln Ser Leu Arg Leu
115          120          125
Phe Cys Asn Thr Ser Val Pro Ala Thr Arg Val Ala Trp Val Ser Pro
130          135          140
Lys Asn Glu Leu Leu Val Ala Pro Ala Ser Gln Asp Gly Ser Ile Ala
145          150          155          160
Val Leu Ala Asp Gly Ser Leu Ala Ile Gly Arg Val Gln Glu Gln His
165          170          175
Ala Gly Val Phe Val Cys Leu Ala Ser Gly Pro Arg Leu His His Asn
180          185          190
Gln Thr Leu Glu Tyr Asn Val Ser Val Gln Lys Ala Arg Pro Glu Pro
195          200          205
Glu Thr Phe Asn Thr Gly Phe Thr Thr Leu Leu Gly Cys Ile Val Gly
210          215          220
Leu Val Leu Val Leu Leu Tyr Leu Phe Ala Pro Pro Cys Arg Gly Cys
225          230          235          240
Cys His Cys Cys Gln Arg Ala Cys Arg Asn Arg Cys Trp Pro Arg Ala
245          250          255
Ser Ser Pro Leu Gln Glu Leu Ser Ala Gln Ser Ser Met Leu Ser Thr
260          265          270
Thr Pro Pro Asp Ala Pro Ser Arg Lys Ala Ser Val His Lys His Val
275          280          285
Val Phe Leu Glu Pro Gly Lys Lys Gly Leu Asn Gly Arg Val Gln Leu
290          295          300
Ala Val Pro Pro Asp Ser Asp Leu Cys Asn Pro Met Gly Leu Gln Leu

```

305

310

315

320

<210> 364
 <211> 16
 <212> PRT
 <213> Mus sp.

<400> 364
 Pro Phe Leu Phe Asn His Leu His Gly Leu Gly Leu Thr Arg Leu Arg
 1 5 10 15

<210> 365
 <211> 304
 <212> PRT
 <213> Mus sp.

<400> 365
 Thr Leu Asp Leu Ser Ser Asn Trp Leu Lys His Ile Ser Ile Pro Glu
 1 5 10 15
 Leu Ala Ala Leu Pro Thr Tyr Leu Lys Asn Arg Leu Tyr Leu His Asn
 20 25 30
 Asn Pro Leu Pro Cys Asp Cys Ser Leu Tyr His Leu Leu Arg Arg Trp
 35 40 45
 His Gln Arg Gly Leu Ser Ala Leu His Asp Phe Glu Arg Glu Tyr Thr
 50 55 60
 Cys Leu Val Phe Lys Val Ser Glu Ser Arg Val Arg Phe Phe Glu His
 65 70 75 80
 Ser Arg Val Phe Lys Asn Cys Ser Val Ala Ala Pro Gly Leu Glu
 85 90 95
 Leu Pro Glu Glu Gln Leu His Ala Gln Val Gly Gln Ser Leu Arg Leu
 100 105 110
 Phe Cys Asn Thr Ser Val Pro Ala Thr Arg Val Ala Trp Val Ser Pro
 115 120 125
 Lys Asn Glu Leu Leu Val Ala Pro Ala Ser Gln Asp Gly Ser Ile Ala
 130 135 140
 Val Leu Ala Asp Gly Ser Leu Ala Ile Gly Arg Val Gln Glu Gln His
 145 150 155 160
 Ala Gly Val Phe Val Cys Leu Ala Ser Gly Pro Arg Leu His His Asn
 165 170 175
 Gln Thr Leu Glu Tyr Asn Val Ser Val Gln Lys Ala Arg Pro Glu Pro
 180 185 190
 Glu Thr Phe Asn Thr Gly Phe Thr Thr Leu Leu Gly Cys Ile Val Gly
 195 200 205
 Leu Val Leu Val Leu Leu Tyr Leu Phe Ala Pro Pro Cys Arg Gly Cys
 210 215 220
 Cys His Cys Cys Gln Arg Ala Cys Arg Asn Arg Cys Trp Pro Arg Ala
 225 230 235 240
 Ser Ser Pro Leu Gln Glu Leu Ser Ala Gln Ser Ser Met Leu Ser Thr
 245 250 255
 Thr Pro Pro Asp Ala Pro Ser Arg Lys Ala Ser Val His Lys His Val
 260 265 270
 Val Phe Leu Glu Pro Gly Lys Lys Gly Leu Asn Gly Arg Val Gln Leu
 275 280 285
 Ala Val Pro Pro Asp Ser Asp Leu Cys Asn Pro Met Gly Leu Gln Leu
 290 295 300

<210> 366
 <211> 197
 <212> PRT
 <213> Mus sp.

<400> 366
 Thr Leu Asp Leu Ser Ser Asn Trp Leu Lys His Ile Ser Ile Pro Glu
 1 5 10 15
 Leu Ala Ala Leu Pro Thr Tyr Leu Lys Asn Arg Leu Tyr Leu His Asn
 20 25 30
 Asn Pro Leu Pro Cys Asp Cys Ser Leu Tyr His Leu Leu Arg Arg Trp
 35 40 45
 His Gln Arg Gly Leu Ser Ala Leu His Asp Phe Glu Arg Glu Tyr Thr
 50 55 60
 Cys Leu Val Phe Lys Val Ser Glu Ser Arg Val Arg Phe Phe Glu His
 65 70 75 80
 Ser Arg Val Phe Lys Asn Cys Ser Val Ala Ala Ala Pro Gly Leu Glu
 85 90 95
 Leu Pro Glu Glu Gln Leu His Ala Gln Val Gly Gln Ser Leu Arg Leu
 100 105 110
 Phe Cys Asn Thr Ser Val Pro Ala Thr Arg Val Ala Trp Val Ser Pro
 115 120 125
 Lys Asn Glu Leu Leu Val Ala Pro Ala Ser Gln Asp Gly Ser Ile Ala
 130 135 140
 Val Leu Ala Asp Gly Ser Leu Ala Ile Gly Arg Val Gln Glu Gln His
 145 150 155 160
 Ala Gly Val Phe Val Cys Leu Ala Ser Gly Pro Arg Leu His His Asn
 165 170 175
 Gln Thr Leu Glu Tyr Asn Val Ser Val Gln Lys Ala Arg Pro Glu Pro
 180 185 190
 Glu Thr Phe Asn Thr
 195

<210> 367
 <211> 20
 <212> PRT
 <213> Mus sp.

<400> 367
 Gly Phe Thr Thr Leu Leu Gly Cys Ile Val Gly Leu Val Leu Val Leu
 1 5 10 15
 Leu Tyr Leu Phe
 20

<210> 368
 <211> 87
 <212> PRT
 <213> Mus sp.

<400> 368
 Ala Pro Pro Cys Arg Gly Cys Cys His Cys Cys Gln Arg Ala Cys Arg
 1 5 10 15
 Asn Arg Cys Trp Pro Arg Ala Ser Ser Pro Leu Gln Glu Leu Ser Ala


```

gtcagcgctg cccggctctc caaagtcctc tatgtcatca ccaccagccc cagccacca 1140
cctcagactg tcccaggtag caattcctgg gcgccacca tgggggctgg aagccacaga 1200
gttgaaggat ggacagtcta tggctctggca actctcctca tcctcacagt cacagccatt 1260
gtagcaaaga tacttctgca cgtcacattc aaatcccata gtgttcctgc ttcaggggac 1320
cttagggatt gtcacaaacc agggacttcg ggggaaatct ggagcatttt ttacaagcct 1380
tccacttcaa ttccatctt taagaagaaa ctcaagggtc agagtcaaca agatgaccgc 1440
aatccccttg tgagtgacta aaaacccccc tgtgcctagg acttgaggtc cctctttgag 1500
ctcaaggctg ccgtggtcaa cctctcctgt ggttcttctc tgacagactc ttcctcctc 1560
tcctctctgc tcggcctctt cggggaaacc ctctcctac agactaggaa gaggcacctg 1620
ctgccagggc aggcagagcc tggattcctc ctgctt 1656

```

<210> 372
 <211> 1425
 <212> DNA
 <213> Homo sapiens

```

<400> 372
atggcgccgc ccgcccgcgc cctcgccctg ctctccgcgc cggcgctcac gctggcgcc 60
cggcccgcgc ctagccccgc cctcggcccc ggaccagagt gtttcacagc caatggtgcg 120
gattataggg gaacacagaa ctggacagca ctacaaggcg ggaagccatg tctgttttg 180
aacgagactt tccagcatcc atacaacact ctgaaatacc ccaacgggga ggggggcctg 240
ggtgagcaca actattgcag aaatccagat ggagacgtga gcccctggtg ctatgtggca 300
gagcacgagg atggtgtcta ctggaagtac tgtgagatac ctgcttgcca gatgcctgga 360
aaccttggct gctacaagga tcatggaaac ccacctctc taactggcac cagtaaaacg 420
tccaacaaac tcaccataca aacttgcata agtttttgtc ggagtcagag gttcaagttt 480
gctgggatgg agtcaggcta tgcttgcttc tgtggaaaca atcctgatta ctggaagtac 540
ggggaggcag ccagtaccga atgcaacagc gtctgcttcg gggatcacac ccaaccctgt 600
ggtggcgatg gcaggatcat cctctttgat actctcgtgg gcgcctgcgg tgggaactac 660
tcagccatgt cttctgtggt ctattccccg gacttccccg acacctatgc cacggggagg 720
gtctgtactt ggaccatccg ggttccgggg gcctcccaca tccacttcag cttcccccta 780
tttgacatca gggactcggc ggacatggtg gagcttcttg atggctacac ccaccgtgtc 840
ctagcccgct tccacgggag gagccgcca cctctgtcct tcaacgtctc tctggacttc 900
gtcatcttgt atttcttctc tgatcgcatc aatcaggccc agggatttgc tgttttatac 960
caagccgtca aggaagaact gccacaggag agggccgctg tcaaccagac ggtggccgag 1020
gtgatcacgg agcaggccaa cctcagtgtc agcgtgccc ggtcctccaa agtcctctat 1080
gtcatcacca ccagccccag ccaccacact cagactgtcc caggtagcaa ttcctgggag 1140
ccacccatgg gggctggaag ccacagagtt gaaggatgga cagtctatgg tctggcaact 1200
ctcctcatcc tcacagtcac agccattgta gcaaagatac ttctgcacgt cacattcaaa 1260
tcccatcgtg ttcctgcttc aggggacctt agggattgtc atcaaccagg gacttcgggg 1320
gaaatctgga gcatttttta caagccttcc acttcaattt ccattcttaa gaagaaactc 1380
aagggtcaga gtcaacaaga tgaccgcaat ccccttgtga gtgac 1425

```

<210> 373
 <211> 475
 <212> PRT
 <213> Homo sapiens

```

<400> 373
Met Ala Pro Pro Ala Ala Arg Leu Ala Leu Leu Ser Ala Ala Ala Leu
 1             5             10             15
Thr Leu Ala Ala Arg Pro Ala Pro Ser Pro Gly Leu Gly Pro Gly Pro
      20             25             30
Glu Cys Phe Thr Ala Asn Gly Ala Asp Tyr Arg Gly Thr Gln Asn Trp
      35             40             45
Thr Ala Leu Gln Gly Gly Lys Pro Cys Leu Phe Trp Asn Glu Thr Phe
      50             55             60
Gln His Pro Tyr Asn Thr Leu Lys Tyr Pro Asn Gly Glu Gly Gly Leu

```

65					70					75					80
Gly	Glu	His	Asn	Tyr	Cys	Arg	Asn	Pro	Asp	Gly	Asp	Val	Ser	Pro	Trp
				85					90					95	
Cys	Tyr	Val	Ala	Glu	His	Glu	Asp	Gly	Val	Tyr	Trp	Lys	Tyr	Cys	Glu
			100					105					110		
Ile	Pro	Ala	Cys	Gln	Met	Pro	Gly	Asn	Leu	Gly	Cys	Tyr	Lys	Asp	His
		115					120					125			
Gly	Asn	Pro	Pro	Pro	Leu	Thr	Gly	Thr	Ser	Lys	Thr	Ser	Asn	Lys	Leu
	130					135					140				
Thr	Ile	Gln	Thr	Cys	Ile	Ser	Phe	Cys	Arg	Ser	Gln	Arg	Phe	Lys	Phe
145					150					155					160
Ala	Gly	Met	Glu	Ser	Gly	Tyr	Ala	Cys	Phe	Cys	Gly	Asn	Asn	Pro	Asp
				165					170					175	
Tyr	Trp	Lys	Tyr	Gly	Glu	Ala	Ala	Ser	Thr	Glu	Cys	Asn	Ser	Val	Cys
			180					185					190		
Phe	Gly	Asp	His	Thr	Gln	Pro	Cys	Gly	Gly	Asp	Gly	Arg	Ile	Ile	Leu
	195						200					205			
Phe	Asp	Thr	Leu	Val	Gly	Ala	Cys	Gly	Gly	Asn	Tyr	Ser	Ala	Met	Ser
	210					215					220				
Ser	Val	Val	Tyr	Ser	Pro	Asp	Phe	Pro	Asp	Thr	Tyr	Ala	Thr	Gly	Arg
225					230					235					240
Val	Cys	Tyr	Trp	Thr	Ile	Arg	Val	Pro	Gly	Ala	Ser	His	Ile	His	Phe
				245					250					255	
Ser	Phe	Pro	Leu	Phe	Asp	Ile	Arg	Asp	Ser	Ala	Asp	Met	Val	Glu	Leu
			260					265					270		
Leu	Asp	Gly	Tyr	Thr	His	Arg	Val	Leu	Ala	Arg	Phe	His	Gly	Arg	Ser
	275						280					285			
Arg	Pro	Pro	Leu	Ser	Phe	Asn	Val	Ser	Leu	Asp	Phe	Val	Ile	Leu	Tyr
	290					295					300				
Phe	Phe	Ser	Asp	Arg	Ile	Asn	Gln	Ala	Gln	Gly	Phe	Ala	Val	Leu	Tyr
305					310					315					320
Gln	Ala	Val	Lys	Glu	Glu	Leu	Pro	Gln	Glu	Arg	Pro	Ala	Val	Asn	Gln
				325					330					335	
Thr	Val	Ala	Glu	Val	Ile	Thr	Glu	Gln	Ala	Asn	Leu	Ser	Val	Ser	Ala
			340					345					350		
Ala	Arg	Ser	Ser	Lys	Val	Leu	Tyr	Val	Ile	Thr	Thr	Ser	Pro	Ser	His
			355				360					365			
Pro	Pro	Gln	Thr	Val	Pro	Gly	Ser	Asn	Ser	Trp	Ala	Pro	Pro	Met	Gly
	370					375					380				
Ala	Gly	Ser	His	Arg	Val	Glu	Gly	Trp	Thr	Val	Tyr	Gly	Leu	Ala	Thr
385					390					395					400
Leu	Leu	Ile	Leu	Thr	Val	Thr	Ala	Ile	Val	Ala	Lys	Ile	Leu	Leu	His
			405						410					415	
Val	Thr	Phe	Lys	Ser	His	Arg	Val	Pro	Ala	Ser	Gly	Asp	Leu	Arg	Asp
			420					425					430		
Cys	His	Gln	Pro	Gly	Thr	Ser	Gly	Glu	Ile	Trp	Ser	Ile	Phe	Tyr	Lys
	435						440					445			
Pro	Ser	Thr	Ser	Ile	Ser	Ile	Phe	Lys	Lys	Lys	Leu	Lys	Gly	Gln	Ser
	450					455					460				
Gln	Gln	Asp	Asp	Arg	Asn	Pro	Leu	Val	Ser	Asp					
465					470					475					

<210> 374
 <211> 19
 <212> PRT
 <213> Homo sapiens

<400> 374

Met Ala Pro Pro Ala Ala Arg Leu Ala Leu Leu Ser Ala Ala Ala Leu
1 5 10 15
Thr Leu Ala

<210> 375

<211> 456

<212> PRT

<213> Homo sapiens

<400> 375

Ala Arg Pro Ala Pro Ser Pro Gly Leu Gly Pro Gly Pro Glu Cys Phe
1 5 10 15
Thr Ala Asn Gly Ala Asp Tyr Arg Gly Thr Gln Asn Trp Thr Ala Leu
20 25 30
Gln Gly Gly Lys Pro Cys Leu Phe Trp Asn Glu Thr Phe Gln His Pro
35 40 45
Tyr Asn Thr Leu Lys Tyr Pro Asn Gly Glu Gly Gly Leu Gly Glu His
50 55 60
Asn Tyr Cys Arg Asn Pro Asp Gly Asp Val Ser Pro Trp Cys Tyr Val
65 70 75 80
Ala Glu His Glu Asp Gly Val Tyr Trp Lys Tyr Cys Glu Ile Pro Ala
85 90 95
Cys Gln Met Pro Gly Asn Leu Gly Cys Tyr Lys Asp His Gly Asn Pro
100 105 110
Pro Pro Leu Thr Gly Thr Ser Lys Thr Ser Asn Lys Leu Thr Ile Gln
115 120 125
Thr Cys Ile Ser Phe Cys Arg Ser Gln Arg Phe Lys Phe Ala Gly Met
130 135 140
Glu Ser Gly Tyr Ala Cys Phe Cys Gly Asn Asn Pro Asp Tyr Trp Lys
145 150 155 160
Tyr Gly Glu Ala Ala Ser Thr Glu Cys Asn Ser Val Cys Phe Gly Asp
165 170 175
His Thr Gln Pro Cys Gly Gly Asp Gly Arg Ile Ile Leu Phe Asp Thr
180 185 190
Leu Val Gly Ala Cys Gly Gly Asn Tyr Ser Ala Met Ser Ser Val Val
195 200 205
Tyr Ser Pro Asp Phe Pro Asp Thr Tyr Ala Thr Gly Arg Val Cys Tyr
210 215 220
Trp Thr Ile Arg Val Pro Gly Ala Ser His Ile His Phe Ser Phe Pro
225 230 235 240
Leu Phe Asp Ile Arg Asp Ser Ala Asp Met Val Glu Leu Leu Asp Gly
245 250 255
Tyr Thr His Arg Val Leu Ala Arg Phe His Gly Arg Ser Arg Pro Pro
260 265 270
Leu Ser Phe Asn Val Ser Leu Asp Phe Val Ile Leu Tyr Phe Phe Ser
275 280 285
Asp Arg Ile Asn Gln Ala Gln Gly Phe Ala Val Leu Tyr Gln Ala Val
290 295 300
Lys Glu Glu Leu Pro Gln Glu Arg Pro Ala Val Asn Gln Thr Val Ala
305 310 315 320
Glu Val Ile Thr Glu Gln Ala Asn Leu Ser Val Ser Ala Ala Arg Ser
325 330 335
Ser Lys Val Leu Tyr Val Ile Thr Thr Ser Pro Ser His Pro Pro Gln

			340					345				350			
Thr	Val	Pro	Gly	Ser	Asn	Ser	Trp	Ala	Pro	Pro	Met	Gly	Ala	Gly	Ser
		355					360					365			
His	Arg	Val	Glu	Gly	Trp	Thr	Val	Tyr	Gly	Leu	Ala	Thr	Leu	Leu	Ile
		370					375					380			
Leu	Thr	Val	Thr	Ala	Ile	Val	Ala	Lys	Ile	Leu	Leu	His	Val	Thr	Phe
385					390					395					400
Lys	Ser	His	Arg	Val	Pro	Ala	Ser	Gly	Asp	Leu	Arg	Asp	Cys	His	Gln
				405					410					415	
Pro	Gly	Thr	Ser	Gly	Glu	Ile	Trp	Ser	Ile	Phe	Tyr	Lys	Pro	Ser	Thr
			420					425					430		
Ser	Ile	Ser	Ile	Phe	Lys	Lys	Lys	Leu	Lys	Gly	Gln	Ser	Gln	Gln	Asp
		435					440					445			
Asp	Arg	Asn	Pro	Leu	Val	Ser	Asp								
	450					455									

<210> 376
 <211> 373
 <212> PRT
 <213> Homo sapiens

<400> 376

Ala	Arg	Pro	Ala	Pro	Ser	Pro	Gly	Leu	Gly	Pro	Gly	Pro	Glu	Cys	Phe
1				5					10					15	
Thr	Ala	Asn	Gly	Ala	Asp	Tyr	Arg	Gly	Thr	Gln	Asn	Trp	Thr	Ala	Leu
		20						25					30		
Gln	Gly	Gly	Lys	Pro	Cys	Leu	Phe	Trp	Asn	Glu	Thr	Phe	Gln	His	Pro
		35					40					45			
Tyr	Asn	Thr	Leu	Lys	Tyr	Pro	Asn	Gly	Glu	Gly	Gly	Leu	Gly	Glu	His
	50					55					60				
Asn	Tyr	Cys	Arg	Asn	Pro	Asp	Gly	Asp	Val	Ser	Pro	Trp	Cys	Tyr	Val
65					70					75					80
Ala	Glu	His	Glu	Asp	Gly	Val	Tyr	Trp	Lys	Tyr	Cys	Glu	Ile	Pro	Ala
				85				90						95	
Cys	Gln	Met	Pro	Gly	Asn	Leu	Gly	Cys	Tyr	Lys	Asp	His	Gly	Asn	Pro
		100						105					110		
Pro	Pro	Leu	Thr	Gly	Thr	Ser	Lys	Thr	Ser	Asn	Lys	Leu	Thr	Ile	Gln
		115					120					125			
Thr	Cys	Ile	Ser	Phe	Cys	Arg	Ser	Gln	Arg	Phe	Lys	Phe	Ala	Gly	Met
	130					135					140				
Glu	Ser	Gly	Tyr	Ala	Cys	Phe	Cys	Gly	Asn	Asn	Pro	Asp	Tyr	Trp	Lys
145					150					155					160
Tyr	Gly	Glu	Ala	Ala	Ser	Thr	Glu	Cys	Asn	Ser	Val	Cys	Phe	Gly	Asp
				165					170					175	
His	Thr	Gln	Pro	Cys	Gly	Gly	Asp	Gly	Arg	Ile	Ile	Leu	Phe	Asp	Thr
		180						185					190		
Leu	Val	Gly	Ala	Cys	Gly	Gly	Asn	Tyr	Ser	Ala	Met	Ser	Ser	Val	Val
		195					200					205			
Tyr	Ser	Pro	Asp	Phe	Pro	Asp	Thr	Tyr	Ala	Thr	Gly	Arg	Val	Cys	Tyr
	210					215					220				
Trp	Thr	Ile	Arg	Val	Pro	Gly	Ala	Ser	His	Ile	His	Phe	Ser	Phe	Pro
225					230					235					240
Leu	Phe	Asp	Ile	Arg	Asp	Ser	Ala	Asp	Met	Val	Glu	Leu	Leu	Asp	Gly
				245					250					255	
Tyr	Thr	His	Arg	Val	Leu	Ala	Arg	Phe	His	Gly	Arg	Ser	Arg	Pro	Pro
			260					265					270		

Leu Ser Phe Asn Val Ser Leu Asp Phe Val Ile Leu Tyr Phe Phe Ser
 275 280 285
 Asp Arg Ile Asn Gln Ala Gln Gly Phe Ala Val Leu Tyr Gln Ala Val
 290 295 300
 Lys Glu Glu Leu Pro Gln Glu Arg Pro Ala Val Asn Gln Thr Val Ala
 305 310 315 320
 Glu Val Ile Thr Glu Gln Ala Asn Leu Ser Val Ser Ala Ala Arg Ser
 325 330 335
 Ser Lys Val Leu Tyr Val Ile Thr Thr Ser Pro Ser His Pro Pro Gln
 340 345 350
 Thr Val Pro Gly Ser Asn Ser Trp Ala Pro Pro Met Gly Ala Gly Ser
 355 360 365
 His Arg Val Glu Gly
 370

<210> 377
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 377
 Trp Thr Val Tyr Gly Leu Ala Thr Leu Leu Ile Leu Thr Val Thr Ala
 1 5 10 15
 Ile Val Ala Lys Ile Leu Leu
 20

<210> 378
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 378
 His Val Thr Phe Lys Ser His Arg Val Pro Ala Ser Gly Asp Leu Arg
 1 5 10 15
 Asp Cys His Gln Pro Gly Thr Ser Gly Glu Ile Trp Ser Ile Phe Tyr
 20 25 30
 Lys Pro Ser Thr Ser Ile Ser Ile Phe Lys Lys Lys Leu Lys Gly Gln
 35 40 45
 Ser Gln Gln Asp Asp Arg Asn Pro Leu Val Ser Asp
 50 55 60

<210> 379
 <211> 4628
 <212> DNA
 <213> Homo sapiens

<400> 379
 gcggccgctc gcgatctaga actagtaatg atgctgcctc aaaactcgtg gcatattgat 60
 tttggaagat gctgctgtca tcagaacctt ttctctgctg tggtaacttg catcctgctc 120
 ctgaattcct gctttctcat cagcagtttt aatggaacag atttggagtt gaggctgggc 180
 aatggagacg gtccttgctc tgggacagtg gaggtgaaat tccagggaca gtgggggact 240
 gtgtgtgatg atgggtggaa cactactgcc tcaactgtcg tgtgcaaaca gcttggatgt 300
 ccattttctt tcgccatgtt tcgttttggg caagccgtga ctagacatgg aaaaatttgg 360
 cttgatgatg tttcctgtta tggaaatgag tcagctctct gggaatgtca acaccgggaa 420

tggggaagcc	ataactgtta	tcatggagaa	gatgttggtg	tgaactgtta	tgggaagcc	480
aatctgggtt	tgaggctagt	ggatggaaac	aactcctgtt	cagggagagt	ggaggtgaaa	540
ttccaagaaa	ggtgggggac	tatatgtgat	gatgggtgga	acttgaatac	tgctgccctg	600
gtgtgcaggc	aactaggatg	tccatcttct	tttatttctt	ctggagtgtg	taatagccct	660
gctgtattgc	gccccatttg	gctggatgac	attttatgcc	aggggaatga	gttggcactc	720
tggaattgca	gacatcgtag	atggggaaat	catgactgca	gtcacaatga	ggatgtcaca	780
ttaacttggt	atgatagtag	tgatcttgaa	ctaaggcttg	taggtggaac	taaccgctgt	840
atggggagag	tagagctgaa	aatccaagga	aggtggggga	ccgtatgcc	ccataagtgg	900
aacaatgctg	cagctgatgt	cgtatgcaag	cagttgggat	gtggaaccgc	acttcacttc	960
gctggcttgc	ctcatttgca	gtcagggtct	gatgttgtat	ggcttgatgg	tgtctcctgc	1020
tccggtaatg	aatcttttct	ttgggactgc	agacattccg	gaaccgtcaa	ttttgactgt	1080
cttcatcaaa	acgatgtgtc	tgtgatctgc	tcagatggag	cagatttgga	actgcgacta	1140
gcagatggaa	gtaacaattg	ttcagggaga	gtagaggtga	gaattcatga	acagtgggtg	1200
acaatatgtg	accagaactg	gaagaatgaa	caagcccttg	tggtttgtaa	gcagctagga	1260
tgtccgttca	gcgtcttttg	cagtcgtcgt	gctaacccta	gtaatgaagc	tagagacatt	1320
tggaataaca	gcatactctg	cactgggaat	gagtcagctc	tctgggactg	cacatatgat	1380
ggaaaagcaa	agcgaacatg	cttccgaaga	tcagatgctg	gagtaatttg	ttctgataag	1440
gcagatctgg	acctaaggct	tgtcggggct	catagccctt	gttatgggag	attggaggtg	1500
aaataccaag	gagagtgggg	gactgtgtgt	catgacagat	ggagcacaag	gaatgcagct	1560
gttgtgtgta	aacaattggg	atgtggaaag	cctatgcatg	tgtttggtat	gacctatttt	1620
aaagaagcat	caggacctat	ttggctggat	gacgtttctt	gcattggaaa	tgagtcaa	1680
atctgggact	gtgaacacag	tggatgggga	aagcataatt	gtgtacacag	agaggatgtg	1740
attgtaacct	gctcaggtga	tgcaacatgg	ggcctgaggc	tgggtgggagg	cagcaaccgc	1800
tgtcgggaa	gactggagg	gtactttcaa	ggcgggtggg	gcacagtgtg	tgatgacggc	1860
tggaacagta	aagctgcagc	tgtggtgtgt	agccagcttg	actgcccatc	ttctatccat	1920
ggcatgggtc	tgggaaacgc	ttctacagga	tatggaaaaa	tttgggtcga	tgatgtttcc	1980
tgtgatggag	atgagtcaga	tctctggtca	tgcaggaaca	gtgggtgggg	aaataatgac	2040
tgcagtcaca	gtgaagatgt	tggagtgtat	tgttctgatg	catcggtat	ggagctgagg	2100
cttgtgggtg	gaagcagcag	gtgtgctgga	aaagttgagg	tgaatgtcca	gggtgccctg	2160
ggaattctgt	gtgctaattg	ctggggaatg	aacattgctg	aagttgtttg	caggcaactt	2220
gaatgtgggt	ctgcaatcag	ggtctccaga	gagcctcatt	tcacagaaa	aacattacac	2280
atcttaatgt	cgaattcttg	ctgcaactga	ggggaagcct	ctctctggga	ttgtatacga	2340
tgggagtggg	aacagactgc	gtgtcattta	aatatggaag	caagtttgat	ctgctcagcc	2400
cacaggcagc	ccaggctggg	tggagctgat	atgccctgct	ctggacgtgt	tgaagtga	2460
catgcagaca	catggcgctc	tgtctgtgat	tctgatttct	ctcttcatgc	tgccaatgtg	2520
ctgtgcagag	aattaaattg	tggagatgcc	atatctcttt	ctgtgggaga	tcactttgga	2580
aaagggaatg	gtctaacttg	ggccgaaaag	ttccagtgtg	aaggagtgga	aactcacctt	2640
gcattatgcc	ccattgttca	acatccggaa	gacacttgta	tcacagcag	agaagttgga	2700
gttgtctgtt	cccgatatac	agatgtccga	cttgtgaatg	gcaaatccca	gtgtgacggg	2760
caagtggaga	tcaacgtgct	tggacactgg	ggctcactgt	gtgacacca	ctgggacca	2820
gaagatgccc	gtgttctatg	cagacagctc	agctgtggga	ctgctctctc	aaccacagga	2880
ggaaaatata	ttggagaaa	aagtgttcgt	gtgtggggac	acaggtttca	ttgcttaggg	2940
aatgagtcac	ttctggataa	ctgtcaa	acagttcttg	gagcacctcc	ctgtatccat	3000
ggaaatactg	tctctgtgat	ctgcacagga	agcctgacct	agccactgtt	tccatgcctc	3060
gcaaatgtat	ctgaccata	tttgtctgca	gttccagagg	gcagtgtctt	gatctgttta	3120
gaggacaaac	ggctccgcct	agtggatggg	gacagccgct	gtgccgggag	agtagagatc	3180
tatcacgacg	gcttctgggg	caccatctgt	gatgacggct	gggacctgag	cgatgccac	3240
gtggtgtgtc	aaaagctggg	ctgtggagtg	gccttcaatg	ccacggtctc	tgctcacttt	3300
ggggaggggt	cagggcccat	ctggctggat	gacctgaact	gcacaggaac	ggagtccac	3360
ttgtggcagt	gcccctccc	cggctggggg	cagcacgact	gcaggcaca	ggaggacgca	3420
ggggtcatct	gctcagaatt	cacagccttg	aggtcttaca	gtgaaactga	aacagagagc	3480
tgtgtgggga	gattggaagt	cttctataac	gggacctggg	gcagcgctcg	caggagggaac	3540
atcaccacag	ccatagcagg	catttgtgtg	aggcagctgg	gctgtgggga	gaatggagtt	3600
gtcagcctcg	cccctttatc	taagacaggc	tctggtttca	tgtgggtgga	tgacattcag	3660
tgtcctaaaa	cgcatactct	catatggcag	tgctgtctct	ccccatggga	gcgaagaatc	3720
tccagcccag	cagaagagac	ctggatcaca	tgtgaagata	gaataagagt	gcgtggagga	3780
gacaccgagt	gctctgggag	agtggagatc	tggcacgcag	gctcctgggg	cacagtgtgt	3840

gatgactcct	gggacctggc	cgaggcggaa	gtggtgtgtc	agcagctggg	ctgtggctct	3900
gctctggctg	ccctgagggg	cgcttcgttt	ggccagggaa	ctggaaccat	ctggttgga	3960
gacatgcggt	gcaaaggaaa	tgagtcattt	ctatgggact	gtcacgccaa	accctgggga	4020
cagagtgact	gtggacacaa	ggaagatgct	ggcgtgaggt	gctctggaca	gtcgtgaaa	4080
tcactgaatg	cctcctcagg	tcatttagca	cttattttat	ccagtatctt	tgggctcctt	4140
ctcctgggtc	tgtttattct	atttctcacg	tgggtgccgag	ttcagaaaca	aaaacatctg	4200
cccctcagag	tttcaaccag	aaggaggggt	tctctcgagg	agaattttatt	ccatgagatg	4260
gagacctgcc	tcaagagaga	ggaccacat	gggacaagaa	cctcagatga	cacccccaac	4320
catggttgtg	aagatgctag	cgacacatcg	ctgttgaggag	ttcttcctgc	ctctgaagcc	4380
acaaaatgac	tttagacttc	cagggtcac	cagatcaacc	tctaaatata	tttgaaggag	4440
acaacaactt	ttaaatgaat	aaagaggaag	tcaagttgcc	ctatggaâaa	cttgtccaaa	4500
taacattttct	tgaacaatag	gagaacagct	aaattgataa	agactggtga	taataaaaaat	4560
tgaattatgt	atatcactgt	taaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	acggacgcgt	4620
gggtcgac						4628

<210> 380

<211> 4359

<212> DNA

<213> Homo sapiens

<400> 380

atgatgctgc	ctcaaaaactc	gtggcatatt	gattttggaa	gatgctgctg	tcatacagaac	60
cttttctctg	ctgttgtaac	ttgcatcctg	ctcctgaatt	cctgctttct	catcagcagt	120
tttaattggaa	cagattttgga	gttgaggctg	gtcaatggag	acggtccttg	ctctgggaca	180
gtggaggtga	aattccaggg	acagtggggg	actgtgtgtg	atgatgggtg	gaacactact	240
gcctcaactg	tcgtgtgcaa	acagcttgga	tgtccatttt	ctttcgccat	gtttcgtttt	300
ggacaagccg	tgactagaca	tggaaaaatt	tggcttgatg	atgtttcctg	ttatggaaat	360
gagtcagctc	tctgggaatg	tcaacaccgg	gaatggggaa	gccataactg	ttatcatgga	420
gaagatgttg	gtgtgaaactg	ttatggtgaa	gccaatctgg	gtttgaggct	agtggatgga	480
aacaactcct	gttcagggag	agtggagggtg	aaattccaag	aaagggtggg	gactatatgt	540
gatgatgggt	ggaacttgaa	tactgctgcc	gtggtgtgca	ggcaactagg	atgtccatct	600
tcttttattt	cttctggagt	tgttaatagc	cctgtgtgat	tgcgccccat	ttggctggat	660
gacattttat	gccaggggaa	tgagttggca	ctctggaatt	gcagacatcg	tggatgggga	720
aatcatgact	gcagtcacaa	tgaggatgtc	acattaaactt	gttatgatag	tagtgatctt	780
gaactaaggc	ttgtaggtgg	aactaaccgc	tgtatgggga	gagtagagct	gaaaatccaa	840
ggaagggtgg	ggaccgtatg	ccaccataag	tggacaatat	ctgcagctga	tgtcgtatgc	900
aagcagttgg	gatgtggaac	cgcacttcac	ttcgttggct	tgcctcattt	gcagtcaggg	960
tctgatgttg	tatggcttga	tgggtgtctcc	tgtctcggta	atgaatcttt	tctttgggac	1020
tgcagacatt	cgggaaccgt	caattttgac	tgtcttcata	aaaacgatgt	gtctgtgatc	1080
tgtctcagat	gagcagattt	ggaactgcga	ctagcagatg	gaagtaacaa	ttgttcaggg	1140
agagtagagg	tgagaattca	tgaacagtgg	tggacaatat	gtgaccagaa	ctggaagaat	1200
gaacaagccc	ttgtggtttg	taagcagcta	ggatgtccgt	tcagcgtctt	tggcagtcgt	1260
cgtgctaacc	ctagtaatga	agctagagac	atttgataa	acagcatatc	ttgactggg	1320
aatgagtcag	ctctctggga	ctgcacatat	gatggaaaag	caaagcgaac	atgcttccga	1380
agatcagatg	ctggagtaat	ttgttctgat	aaggcagatc	tggacctaa	gcttgctggg	1440
gctcatagcc	cctgttatgg	gagattggag	gtgaaatacc	aaggagagtg	ggggactgtg	1500
tgtcatgaca	gatggagcac	aaggaatgca	gctgttgtgt	gtaaacaatt	gggatgtgga	1560
aagcctatgc	atgtgttttg	tatgacctat	tttaaagaag	catcaggacc	tatttggtctg	1620
gatgacgttt	cttgcatgtg	aaatgagtc	aatatctggg	actgtgaaca	cagtggatgg	1680
ggaaagcata	attgtgtaca	cagagaggat	gtgattgtaa	cctgctcagg	tgatgcaaca	1740
tggggcctga	ggctgggtgg	cggcagcaac	cgctgtctcg	gaagactgga	ggtgtacttt	1800
caaggacggt	ggggcacagt	gtgtgatgac	ggctggaaca	gtaaagctgc	agctgtggtg	1860
tgtagccagc	tggactgccc	atcttctatc	attggcatgg	gtctgggaaa	cgcttctaca	1920
ggatatggaa	aaatttggtc	cgatgatgtt	tcctgtgatg	gagatgagtc	agatctcttg	1980
tcatgcagga	acagtgggtg	gggaaataat	gactgcagtc	acagtgaaga	tgttgagtg	2040
atctgttctg	atgcatcgga	tatggagctg	aggcttgtgg	gtggaagcag	caggtgtgct	2100
ggaaaagtgt	aggtgaatgt	ccagggtgcc	gtgggaattc	tgtgtgctaa	tggctgggga	2160

```

atgaacattg ctgaagttgt ttgcaggcaa cttgaatgtg ggtctgcaat cagggctctcc 2220
agagagcctc atttcacaga aagaacatta cacatcttaa tgtcgaattc tggctgcact 2280
ggaggggaag cctctctctg ggattgtata cgatgggagt ggaaacagac tgcgtgtcat 2340
ttaaatatgg aagcaagttt gatctgctca gcccacaggc agcccaggct ggttggagct 2400
gatatgccct gctctggacg tgttgaagtg aaacatgcag acacatggcg ctctgtctgt 2460
gattctgatt tctctcttca tgctgccaat gtgctgtgca gagaattaa ttgtggagat 2520
gccatatctc tttctgtggg agatcacttt ggaaaaggga atggctaac ttgggccgaa 2580
aagttccagt gtgaaggagg tgaaactcac cttgcattat gccccattgt tcaacatccg 2640
gaagacactt gtatccacag cagagaagtt ggagttgtct gttcccgata tacagatgtc 2700
cgacttgtga atggcaaata ccagtgtgac gggcaagtgg agatcaacgt gcttggacac 2760
tggtggtcac tgtgtgacac ccactgggac ccagaagatg cccgtgttct atgcagacag 2820
ctcagctgtg ggactgctct ctcaaccaca ggaggaaaat atattggaga aagaagtgtt 2880
cgtgtgtggg gacacagggt tcattgctta gggaatgagt cacttctgga taactgtcaa 2940
atgacagttc ttggagcacc tccctgtatc catggaaata ctgtctctgt gatctgcaca 3000
ggaagcctga cccagccact gtttccatgc ctgcgaaatg tatctgacct atatttgtct 3060
gcagttccag agggcagctg tttgatctgc tttagaggaca aacggctccg cctagtggat 3120
ggggacagcc gctgtgccgg gagagtagag atctatcacg acggcttctg gggcaccatc 3180
tgtgatgacg gctgggacct gagcgatgcc cacgtggtgt gtcaaaagct gggctgtgga 3240
gtggccttca atgccacggt ctctgtcac tttggggagg ggtcagggcc catctggctg 3300
gatgacctga actgcacagg aacggagtcc cacttgtggc agtgcccttc ccgaggctgg 3360
gggcagcacg actgcaggca caaggaggac gcaggggtca tctgtctcaga attcacagcc 3420
ttgaggctct acagtgaaac tgaaacagag agctgtgctg ggagattgga agtcttctat 3480
aacgggacct ggggcagcgt cggcaggagg aacatcacca cagccatagc aggcatgtg 3540
tgaggcagc tgggctgtgg ggagaatgga gttgtcagcc tcgccccttt atctaagaca 3600
ggctctgggt tcatgtgggt ggatgacatt cagtgtccta aaacgcatat ctccatatgg 3660
cagtgcctgt ctgccccatg ggagcgaaga atctccagcc cagcagaaga gacctggatc 3720
acatgtgaag atagaataag agtgcgtgga ggagacaccg agtgctctgg gagagtggag 3780
atctggcacg caggctcctg gggcacagtg tgtgatgact cctgggacct ggccgaggcg 3840
gaagtgggtg gtcagcagct gggctgtggc tctgtctctg ctgccctgag ggacgcttcg 3900
tttggccagg gaactggaac catctgggtg gatgacatgc ggtgcaaagg aaatgagtca 3960
tttctatggg actgtcacgc caaaccttg ggacagagtg actgtggaca caaggaagat 4020
gctggcgtga ggtgctctgg acagtgcgtg aaatcactga atgcctctc aggtcattta 4080
gcacttattt tatccagtat ctttgggtc cttctcctg ttctgtttat tctatttctc 4140
acgtggtgcc gagttcagaa acaaaaacat ctgcccctca gagtttcaac cagaaggagg 4200
ggttctctcg aggagaattt attccatgag atggagacct gcctcaagag agaggacca 4260
catgggacaa gaacctcaga tgacaccccc aaccatgggt gtgaagatgc tagcgacaca 4320
tcgctgttgg gagttcttcc tgctctgaa gccacaaa 4359

```

<210> 381

<211> 1453

<212> PRT

<213> Homo sapiens

<400> 381

```

Met Met Leu Pro Gln Asn Ser Trp His Ile Asp Phe Gly Arg Cys Cys
 1             5             10             15
Cys His Gln Asn Leu Phe Ser Ala Val Val Thr Cys Ile Leu Leu Leu
      20             25             30
Asn Ser Cys Phe Leu Ile Ser Ser Phe Asn Gly Thr Asp Leu Glu Leu
      35             40             45
Arg Leu Val Asn Gly Asp Gly Pro Cys Ser Gly Thr Val Glu Val Lys
      50             55             60
Phe Gln Gly Gln Trp Gly Thr Val Cys Asp Asp Gly Trp Asn Thr Thr
      65             70             75             80
Ala Ser Thr Val Val Cys Lys Gln Leu Gly Cys Pro Phe Ser Phe Ala
      85             90             95
Met Phe Arg Phe Gly Gln Ala Val Thr Arg His Gly Lys Ile Trp Leu

```


Gly	Lys	His	Asn	Cys	Val	His	Arg	Glu	Asp	Val	Ile	Val	Thr	Cys	Ser	
				565					570					575		
Gly	Asp	Ala	Thr	Trp	Gly	Leu	Arg	Leu	Val	Gly	Gly	Ser	Asn	Arg	Cys	
			580					585					590			
Ser	Gly	Arg	Leu	Glu	Val	Tyr	Phe	Gln	Gly	Arg	Trp	Gly	Thr	Val	Cys	
		595					600					605				
Asp	Asp	Gly	Trp	Asn	Ser	Lys	Ala	Ala	Ala	Val	Val	Cys	Ser	Gln	Leu	
	610					615					620					
Asp	Cys	Pro	Ser	Ser	Ile	Ile	Gly	Met	Gly	Leu	Gly	Asn	Ala	Ser	Thr	
625					630					635					640	
Gly	Tyr	Gly	Lys	Ile	Trp	Leu	Asp	Asp	Val	Ser	Cys	Asp	Gly	Asp	Glu	
			645						650					655		
Ser	Asp	Leu	Trp	Ser	Cys	Arg	Asn	Ser	Gly	Trp	Gly	Asn	Asn	Asp	Cys	
		660						665					670			
Ser	His	Ser	Glu	Asp	Val	Gly	Val	Ile	Cys	Ser	Asp	Ala	Ser	Asp	Met	
		675					680					685				
Glu	Leu	Arg	Leu	Val	Gly	Gly	Ser	Ser	Arg	Cys	Ala	Gly	Lys	Val	Glu	
	690				695						700					
Val	Asn	Val	Gln	Gly	Ala	Val	Gly	Ile	Leu	Cys	Ala	Asn	Gly	Trp	Gly	
705					710					715					720	
Met	Asn	Ile	Ala	Glu	Val	Val	Cys	Arg	Gln	Leu	Glu	Cys	Gly	Ser	Ala	
			725						730					735		
Ile	Arg	Val	Ser	Arg	Glu	Pro	His	Phe	Thr	Glu	Arg	Thr	Leu	His	Ile	
		740						745					750			
Leu	Met	Ser	Asn	Ser	Gly	Cys	Thr	Gly	Gly	Glu	Ala	Ser	Leu	Trp	Asp	
		755					760					765				
Cys	Ile	Arg	Trp	Glu	Trp	Lys	Gln	Thr	Ala	Cys	His	Leu	Asn	Met	Glu	
	770					775					780					
Ala	Ser	Leu	Ile	Cys	Ser	Ala	His	Arg	Gln	Pro	Arg	Leu	Val	Gly	Ala	
785					790					795					800	
Asp	Met	Pro	Cys	Ser	Gly	Arg	Val	Glu	Val	Lys	His	Ala	Asp	Thr	Trp	
			805						810					815		
Arg	Ser	Val	Cys	Asp	Ser	Asp	Phe	Ser	Leu	His	Ala	Ala	Asn	Val	Leu	
		820						825					830			
Cys	Arg	Glu	Leu	Asn	Cys	Gly	Asp	Ala	Ile	Ser	Leu	Ser	Val	Gly	Asp	
		835					840					845				
His	Phe	Gly	Lys	Gly	Asn	Gly	Leu	Thr	Trp	Ala	Glu	Lys	Phe	Gln	Cys	
	850				855						860					
Glu	Gly	Ser	Glu	Thr	His	Leu	Ala	Leu	Cys	Pro	Ile	Val	Gln	His	Pro	
865					870					875					880	
Glu	Asp	Thr	Cys	Ile	His	Ser	Arg	Glu	Val	Gly	Val	Val	Cys	Ser	Arg	
			885						890					895		
Tyr	Thr	Asp	Val	Arg	Leu	Val	Asn	Gly	Lys	Ser	Gln	Cys	Asp	Gly	Gln	
		900						905					910			
Val	Glu	Ile	Asn	Val	Leu	Gly	His	Trp	Gly	Ser	Leu	Cys	Asp	Thr	His	
		915					920					925				
Trp	Asp	Pro	Glu	Asp	Ala	Arg	Val	Leu	Cys	Arg	Gln	Leu	Ser	Cys	Gly	
	930					935					940					
Thr	Ala	Leu	Ser	Thr	Thr	Gly	Gly	Lys	Tyr	Ile	Gly	Glu	Arg	Ser	Val	
945					950					955					960	
Arg	Val	Trp	Gly	His	Arg	Phe	His	Cys	Leu	Gly	Asn	Glu	Ser	Leu	Leu	
			965						970					975		
Asp	Asn	Cys	Gln	Met	Thr	Val	Leu	Gly	Ala	Pro	Pro	Cys	Ile	His	Gly	
		980						985					990			
Asn	Thr	Val	Ser	Val	Ile	Cys	Thr	Gly	Ser	Leu	Thr	Gln	Pro	Leu	Phe	
	995						1000					1005				
Pro	Cys	Leu	Ala	Asn	Val	Ser	Asp	Pro	Tyr	Leu	Ser	Ala	Val	Pro	Glu	

1010	1015	1020
Gly Ser Ala Leu Ile Cys Leu Glu Asp Lys Arg Leu Arg Leu Val Asp		
1025	1030	1035
Gly Asp Ser Arg Cys Ala Gly Arg Val Glu Ile Tyr His Asp Gly Phe		1040
	1045	1050
Trp Gly Thr Ile Cys Asp Asp Gly Trp Asp Leu Ser Asp Ala His Val		1055
	1060	1065
Val Cys Gln Lys Leu Gly Cys Gly Val Ala Phe Asn Ala Thr Val Ser		1070
	1075	1080
Ala His Phe Gly Glu Gly Ser Gly Pro Ile Trp Leu Asp Asp Leu Asn		1085
	1090	1095
Cys Thr Gly Thr Glu Ser His Leu Trp Gln Cys Pro Ser Arg Gly Trp		1100
1105	1110	1115
Gly Gln His Asp Cys Arg His Lys Glu Asp Ala Gly Val Ile Cys Ser		1120
	1125	1130
Glu Phe Thr Ala Leu Arg Leu Tyr Ser Glu Thr Glu Thr Glu Ser Cys		1135
	1140	1145
Ala Gly Arg Leu Glu Val Phe Tyr Asn Gly Thr Trp Gly Ser Val Gly		1150
	1155	1160
Arg Arg Asn Ile Thr Thr Ala Ile Ala Gly Ile Val Cys Arg Gln Leu		1165
1170	1175	1180
Gly Cys Gly Glu Asn Gly Val Val Ser Leu Ala Pro Leu Ser Lys Thr		1185
1185	1190	1195
Gly Ser Gly Phe Met Trp Val Asp Asp Ile Gln Cys Pro Lys Thr His		1200
	1205	1210
Ile Ser Ile Trp Gln Cys Leu Ser Ala Pro Trp Glu Arg Arg Ile Ser		1215
	1220	1225
Ser Pro Ala Glu Glu Thr Trp Ile Thr Cys Glu Asp Arg Ile Arg Val		1230
	1235	1240
Arg Gly Gly Asp Thr Glu Cys Ser Gly Arg Val Glu Ile Trp His Ala		1245
1250	1255	1260
Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Leu Ala Glu Ala		1265
1265	1270	1275
Glu Val Val Cys Gln Gln Leu Gly Cys Gly Ser Ala Leu Ala Ala Leu		1280
	1285	1290
Arg Asp Ala Ser Phe Gly Gln Gly Thr Gly Thr Ile Trp Leu Asp Asp		1295
	1300	1305
Met Arg Cys Lys Gly Asn Glu Ser Phe Leu Trp Asp Cys His Ala Lys		1310
	1315	1320
Pro Trp Gly Gln Ser Asp Cys Gly His Lys Glu Asp Ala Gly Val Arg		1325
1330	1335	1340
Cys Ser Gly Gln Ser Leu Lys Ser Leu Asn Ala Ser Ser Gly His Leu		1345
1345	1350	1355
Ala Leu Ile Leu Ser Ser Ile Phe Gly Leu Leu Leu Leu Val Leu Phe		1360
	1365	1370
Ile Leu Phe Leu Thr Trp Cys Arg Val Gln Lys Gln Lys His Leu Pro		1375
	1380	1385
Leu Arg Val Ser Thr Arg Arg Arg Gly Ser Leu Glu Glu Asn Leu Phe		1390
	1395	1400
His Glu Met Glu Thr Cys Leu Lys Arg Glu Asp Pro His Gly Thr Arg		1405
1410	1415	1420
Thr Ser Asp Asp Thr Pro Asn His Gly Cys Glu Asp Ala Ser Asp Thr		1425
1425	1430	1435
Ser Leu Leu Gly Val Leu Pro Ala Ser Glu Ala Thr Lys		1440
	1445	1450

<210> 382
 <211> 40
 <212> PRT
 <213> Homo sapiens

<400> 382
 Met Met Leu Pro Gln Asn Ser Trp His Ile Asp Phe Gly Arg Cys Cys
 1 5 10 15
 Cys His Gln Asn Leu Phe Ser Ala Val Val Thr Cys Ile Leu Leu Leu
 20 25 30
 Asn Ser Cys Phe Leu Ile Ser Ser
 35 40

<210> 383
 <211> 1413
 <212> PRT
 <213> Homo sapiens

<400> 383
 Phe Asn Gly Thr Asp Leu Glu Leu Arg Leu Val Asn Gly Asp Gly Pro
 1 5 10 15
 Cys Ser Gly Thr Val Glu Val Lys Phe Gln Gly Gln Trp Gly Thr Val
 20 25 30
 Cys Asp Asp Gly Trp Asn Thr Thr Ala Ser Thr Val Val Cys Lys Gln
 35 40 45
 Leu Gly Cys Pro Phe Ser Phe Ala Met Phe Arg Phe Gly Gln Ala Val
 50 55 60
 Thr Arg His Gly Lys Ile Trp Leu Asp Asp Val Ser Cys Tyr Gly Asn
 65 70 75 80
 Glu Ser Ala Leu Trp Glu Cys Gln His Arg Glu Trp Gly Ser His Asn
 85 90 95
 Cys Tyr His Gly Glu Asp Val Gly Val Asn Cys Tyr Gly Glu Ala Asn
 100 105 110
 Leu Gly Leu Arg Leu Val Asp Gly Asn Asn Ser Cys Ser Gly Arg Val
 115 120 125
 Glu Val Lys Phe Gln Glu Arg Trp Gly Thr Ile Cys Asp Asp Gly Trp
 130 135 140
 Asn Leu Asn Thr Ala Ala Val Val Cys Arg Gln Leu Gly Cys Pro Ser
 145 150 155 160
 Ser Phe Ile Ser Ser Gly Val Val Asn Ser Pro Ala Val Leu Arg Pro
 165 170 175
 Ile Trp Leu Asp Asp Ile Leu Cys Gln Gly Asn Glu Leu Ala Leu Trp
 180 185 190
 Asn Cys Arg His Arg Gly Trp Gly Asn His Asp Cys Ser His Asn Glu
 195 200 205
 Asp Val Thr Leu Thr Cys Tyr Asp Ser Ser Asp Leu Glu Leu Arg Leu
 210 215 220
 Val Gly Gly Thr Asn Arg Cys Met Gly Arg Val Glu Leu Lys Ile Gln
 225 230 235 240
 Gly Arg Trp Gly Thr Val Cys His His Lys Trp Asn Asn Ala Ala Ala
 245 250 255
 Asp Val Val Cys Lys Gln Leu Gly Cys Gly Thr Ala Leu His Phe Ala
 260 265 270
 Gly Leu Pro His Leu Gln Ser Gly Ser Asp Val Val Trp Leu Asp Gly
 275 280 285
 Val Ser Cys Ser Gly Asn Glu Ser Phe Leu Trp Asp Cys Arg His Ser

290		295		300
Gly Thr Val Asn Phe Asp Cys Leu His Gln Asn Asp Val Ser Val Ile				
305		310		315
Cys Ser Asp Gly Ala Asp Leu Glu Leu Arg Leu Ala Asp Gly Ser Asn				
	325		330	
Asn Cys Ser Gly Arg Val Glu Val Arg Ile His Glu Gln Trp Trp Thr				
	340		345	
Ile Cys Asp Gln Asn Trp Lys Asn Glu Gln Ala Leu Val Val Cys Lys				
	355		360	
Gln Leu Gly Cys Pro Phe Ser Val Phe Gly Ser Arg Arg Ala Lys Pro				
	370		375	
Ser Asn Glu Ala Arg Asp Ile Trp Ile Asn Ser Ile Ser Cys Thr Gly				
385		390		395
Asn Glu Ser Ala Leu Trp Asp Cys Thr Tyr Asp Gly Lys Ala Lys Arg				
	405		410	
Thr Cys Phe Arg Arg Ser Asp Ala Gly Val Ile Cys Ser Asp Lys Ala				
	420		425	
Asp Leu Asp Leu Arg Leu Val Gly Ala His Ser Pro Cys Tyr Gly Arg				
	435		440	
Leu Glu Val Lys Tyr Gln Gly Glu Trp Gly Thr Val Cys His Asp Arg				
	450		455	
Trp Ser Thr Arg Asn Ala Ala Val Val Cys Lys Gln Leu Gly Cys Gly				
465		470		475
Lys Pro Met His Val Phe Gly Met Thr Tyr Phe Lys Glu Ala Ser Gly				
	485		490	
Pro Ile Trp Leu Asp Asp Val Ser Cys Ile Gly Asn Glu Ser Asn Ile				
	500		505	
Trp Asp Cys Glu His Ser Gly Trp Gly Lys His Asn Cys Val His Arg				
	515		520	
Glu Asp Val Ile Val Thr Cys Ser Gly Asp Ala Thr Trp Gly Leu Arg				
	530		535	
Leu Val Gly Gly Ser Asn Arg Cys Ser Gly Arg Leu Glu Val Tyr Phe				
545		550		555
Gln Gly Arg Trp Gly Thr Val Cys Asp Asp Gly Trp Asn Ser Lys Ala				
	565		570	
Ala Ala Val Val Cys Ser Gln Leu Asp Cys Pro Ser Ser Ile Ile Gly				
	580		585	
Met Gly Leu Gly Asn Ala Ser Thr Gly Tyr Gly Lys Ile Trp Leu Asp				
	595		600	
Asp Val Ser Cys Asp Gly Asp Glu Ser Asp Leu Trp Ser Cys Arg Asn				
	610		615	
Ser Gly Trp Gly Asn Asn Asp Cys Ser His Ser Glu Asp Val Gly Val				
625		630		635
Ile Cys Ser Asp Ala Ser Asp Met Glu Leu Arg Leu Val Gly Gly Ser				
	645		650	
Ser Arg Cys Ala Gly Lys Val Glu Val Asn Val Gln Gly Ala Val Gly				
	660		665	
Ile Leu Cys Ala Asn Gly Trp Gly Met Asn Ile Ala Glu Val Val Cys				
	675		680	
Arg Gln Leu Glu Cys Gly Ser Ala Ile Arg Val Ser Arg Glu Pro His				
	690		695	
Phe Thr Glu Arg Thr Leu His Ile Leu Met Ser Asn Ser Gly Cys Thr				
705		710		715
Gly Gly Glu Ala Ser Leu Trp Asp Cys Ile Arg Trp Glu Trp Lys Gln				
	725		730	
Thr Ala Cys His Leu Asn Met Glu Ala Ser Leu Ile Cys Ser Ala His				
	740		745	
				750

Arg	Gln	Pro	Arg	Leu	Val	Gly	Ala	Asp	Met	Pro	Cys	Ser	Gly	Arg	Val
		755					760					765			
Glu	Val	Lys	His	Ala	Asp	Thr	Trp	Arg	Ser	Val	Cys	Asp	Ser	Asp	Phe
	770					775					780				
Ser	Leu	His	Ala	Ala	Asn	Val	Leu	Cys	Arg	Glu	Leu	Asn	Cys	Gly	Asp
785					790					795					800
Ala	Ile	Ser	Leu	Ser	Val	Gly	Asp	His	Phe	Gly	Lys	Gly	Asn	Gly	Leu
				805					810					815	
Thr	Trp	Ala	Glu	Lys	Phe	Gln	Cys	Glu	Gly	Ser	Glu	Thr	His	Leu	Ala
			820					825					830		
Leu	Cys	Pro	Ile	Val	Gln	His	Pro	Glu	Asp	Thr	Cys	Ile	His	Ser	Arg
		835					840					845			
Glu	Val	Gly	Val	Val	Cys	Ser	Arg	Tyr	Thr	Asp	Val	Arg	Leu	Val	Asn
	850					855					860				
Gly	Lys	Ser	Gln	Cys	Asp	Gly	Gln	Val	Glu	Ile	Asn	Val	Leu	Gly	His
865					870					875					880
Trp	Gly	Ser	Leu	Cys	Asp	Thr	His	Trp	Asp	Pro	Glu	Asp	Ala	Arg	Val
				885					890					895	
Leu	Cys	Arg	Gln	Leu	Ser	Cys	Gly	Thr	Ala	Leu	Ser	Thr	Thr	Gly	Gly
			900					905					910		
Lys	Tyr	Ile	Gly	Glu	Arg	Ser	Val	Arg	Val	Trp	Gly	His	Arg	Phe	His
		915					920					925			
Cys	Leu	Gly	Asn	Glu	Ser	Leu	Leu	Asp	Asn	Cys	Gln	Met	Thr	Val	Leu
	930					935					940				
Gly	Ala	Pro	Pro	Cys	Ile	His	Gly	Asn	Thr	Val	Ser	Val	Ile	Cys	Thr
945					950					955					960
Gly	Ser	Leu	Thr	Gln	Pro	Leu	Phe	Pro	Cys	Leu	Ala	Asn	Val	Ser	Asp
				965					970					975	
Pro	Tyr	Leu	Ser	Ala	Val	Pro	Glu	Gly	Ser	Ala	Leu	Ile	Cys	Leu	Glu
		980						985					990		
Asp	Lys	Arg	Leu	Arg	Leu	Val	Asp	Gly	Asp	Ser	Arg	Cys	Ala	Gly	Arg
		995					1000						1005		
Val	Glu	Ile	Tyr	His	Asp	Gly	Phe	Trp	Gly	Thr	Ile	Cys	Asp	Asp	Gly
	1010					1015					1020				
Trp	Asp	Leu	Ser	Asp	Ala	His	Val	Val	Cys	Gln	Lys	Leu	Gly	Cys	Gly
1025					1030					1035					1040
Val	Ala	Phe	Asn	Ala	Thr	Val	Ser	Ala	His	Phe	Gly	Glu	Gly	Ser	Gly
				1045					1050					1055	
Pro	Ile	Trp	Leu	Asp	Asp	Leu	Asn	Cys	Thr	Gly	Thr	Glu	Ser	His	Leu
			1060					1065					1070		
Trp	Gln	Cys	Pro	Ser	Arg	Gly	Trp	Gly	Gln	His	Asp	Cys	Arg	His	Lys
		1075					1080					1085			
Glu	Asp	Ala	Gly	Val	Ile	Cys	Ser	Glu	Phe	Thr	Ala	Leu	Arg	Leu	Tyr
	1090					1095					1100				
Ser	Glu	Thr	Glu	Thr	Glu	Ser	Cys	Ala	Gly	Arg	Leu	Glu	Val	Phe	Tyr
1105					1110					1115					1120
Asn	Gly	Thr	Trp	Gly	Ser	Val	Gly	Arg	Arg	Asn	Ile	Thr	Thr	Ala	Ile
				1125					1130					1135	
Ala	Gly	Ile	Val	Cys	Arg	Gln	Leu	Gly	Cys	Gly	Glu	Asn	Gly	Val	Val
			1140					1145				1150			
Ser	Leu	Ala	Pro	Leu	Ser	Lys	Thr	Gly	Ser	Gly	Phe	Met	Trp	Val	Asp
		1155					1160					1165			
Asp	Ile	Gln	Cys	Pro	Lys	Thr	His	Ile	Ser	Ile	Trp	Gln	Cys	Leu	Ser
	1170					1175					1180				
Ala	Pro	Trp	Glu	Arg	Arg	Ile	Ser	Ser	Pro	Ala	Glu	Glu	Thr	Trp	Ile
1185					1190					1195					1200
Thr	Cys	Glu	Asp	Arg	Ile	Arg	Val	Arg	Gly	Gly	Asp	Thr	Glu	Cys	Ser

				1205					1210					1215	
Gly	Arg	Val	Glu	Ile	Trp	His	Ala	Gly	Ser	Trp	Gly	Thr	Val	Cys	Asp
			1220					1225					1230		
Asp	Ser	Trp	Asp	Leu	Ala	Glu	Ala	Glu	Val	Val	Cys	Gln	Gln	Leu	Gly
		1235						1240				1245			
Cys	Gly	Ser	Ala	Leu	Ala	Ala	Leu	Arg	Asp	Ala	Ser	Phe	Gly	Gln	Gly
	1250					1255				1260					
Thr	Gly	Thr	Ile	Trp	Leu	Asp	Asp	Met	Arg	Cys	Lys	Gly	Asn	Glu	Ser
1265				1270					1275					1280	
Phe	Leu	Trp	Asp	Cys	His	Ala	Lys	Pro	Trp	Gly	Gln	Ser	Asp	Cys	Gly
			1285					1290					1295		
His	Lys	Glu	Asp	Ala	Gly	Val	Arg	Cys	Ser	Gly	Gln	Ser	Leu	Lys	Ser
	1300						1305					1310			
Leu	Asn	Ala	Ser	Ser	Gly	His	Leu	Ala	Leu	Ile	Leu	Ser	Ser	Ile	Phe
	1315					1320					1325				
Gly	Leu	Leu	Leu	Leu	Val	Leu	Phe	Ile	Leu	Phe	Leu	Thr	Trp	Cys	Arg
	1330					1335				1340					
Val	Gln	Lys	Gln	Lys	His	Leu	Pro	Leu	Arg	Val	Ser	Thr	Arg	Arg	Arg
1345					1350				1355					1360	
Gly	Ser	Leu	Glu	Glu	Asn	Leu	Phe	His	Glu	Met	Glu	Thr	Cys	Leu	Lys
			1365					1370					1375		
Arg	Glu	Asp	Pro	His	Gly	Thr	Arg	Thr	Ser	Asp	Asp	Thr	Pro	Asn	His
	1380						1385					1390			
Gly	Cys	Glu	Asp	Ala	Ser	Asp	Thr	Ser	Leu	Leu	Gly	Val	Leu	Pro	Ala
	1395					1400					1405				
Ser	Glu	Ala	Thr	Lys											
	1410														

<210> 384
 <211> 1319
 <212> PRT
 <213> Homo sapiens

<400> 384

Phe	Asn	Gly	Thr	Asp	Leu	Glu	Leu	Arg	Leu	Val	Asn	Gly	Asp	Gly	Pro
1				5				10					15		
Cys	Ser	Gly	Thr	Val	Glu	Val	Lys	Phe	Gln	Gly	Gln	Trp	Gly	Thr	Val
	20						25					30			
Cys	Asp	Asp	Gly	Trp	Asn	Thr	Thr	Ala	Ser	Thr	Val	Val	Cys	Lys	Gln
	35					40					45				
Leu	Gly	Cys	Pro	Phe	Ser	Phe	Ala	Met	Phe	Arg	Phe	Gly	Gln	Ala	Val
	50				55					60					
Thr	Arg	His	Gly	Lys	Ile	Trp	Leu	Asp	Asp	Val	Ser	Cys	Tyr	Gly	Asn
65				70				75						80	
Glu	Ser	Ala	Leu	Trp	Glu	Cys	Gln	His	Arg	Glu	Trp	Gly	Ser	His	Asn
			85					90					95		
Cys	Tyr	His	Gly	Glu	Asp	Val	Gly	Val	Asn	Cys	Tyr	Gly	Glu	Ala	Asn
	100						105					110			
Leu	Gly	Leu	Arg	Leu	Val	Asp	Gly	Asn	Asn	Ser	Cys	Ser	Gly	Arg	Val
	115					120					125				
Glu	Val	Lys	Phe	Gln	Glu	Arg	Trp	Gly	Thr	Ile	Cys	Asp	Asp	Gly	Trp
	130					135				140					
Asn	Leu	Asn	Thr	Ala	Ala	Val	Val	Cys	Arg	Gln	Leu	Gly	Cys	Pro	Ser
145				150				155						160	
Ser	Phe	Ile	Ser	Ser	Gly	Val	Val	Asn	Ser	Pro	Ala	Val	Leu	Arg	Pro
			165					170						175	

Ile	Trp	Leu	Asp	Asp	Ile	Leu	Cys	Gln	Gly	Asn	Glu	Leu	Ala	Leu	Trp
			180					185					190		
Asn	Cys	Arg	His	Arg	Gly	Trp	Gly	Asn	His	Asp	Cys	Ser	His	Asn	Glu
		195					200					205			
Asp	Val	Thr	Leu	Thr	Cys	Tyr	Asp	Ser	Ser	Asp	Leu	Glu	Leu	Arg	Leu
	210					215					220				
Val	Gly	Gly	Thr	Asn	Arg	Cys	Met	Gly	Arg	Val	Glu	Leu	Lys	Ile	Gln
225					230					235					240
Gly	Arg	Trp	Gly	Thr	Val	Cys	His	His	Lys	Trp	Asn	Asn	Ala	Ala	Ala
				245					250						255
Asp	Val	Val	Cys	Lys	Gln	Leu	Gly	Cys	Gly	Thr	Ala	Leu	His	Phe	Ala
			260					265						270	
Gly	Leu	Pro	His	Leu	Gln	Ser	Gly	Ser	Asp	Val	Val	Trp	Leu	Asp	Gly
		275					280					285			
Val	Ser	Cys	Ser	Gly	Asn	Glu	Ser	Phe	Leu	Trp	Asp	Cys	Arg	His	Ser
	290					295					300				
Gly	Thr	Val	Asn	Phe	Asp	Cys	Leu	His	Gln	Asn	Asp	Val	Ser	Val	Ile
305					310					315					320
Cys	Ser	Asp	Gly	Ala	Asp	Leu	Glu	Leu	Arg	Leu	Ala	Asp	Gly	Ser	Asn
				325					330						335
Asn	Cys	Ser	Gly	Arg	Val	Glu	Val	Arg	Ile	His	Glu	Gln	Trp	Trp	Thr
			340					345						350	
Ile	Cys	Asp	Gln	Asn	Trp	Lys	Asn	Glu	Gln	Ala	Leu	Val	Val	Cys	Lys
		355					360					365			
Gln	Leu	Gly	Cys	Pro	Phe	Ser	Val	Phe	Gly	Ser	Arg	Arg	Ala	Lys	Pro
	370					375					380				
Ser	Asn	Glu	Ala	Arg	Asp	Ile	Trp	Ile	Asn	Ser	Ile	Ser	Cys	Thr	Gly
385					390					395					400
Asn	Glu	Ser	Ala	Leu	Trp	Asp	Cys	Thr	Tyr	Asp	Gly	Lys	Ala	Lys	Arg
			405						410						415
Thr	Cys	Phe	Arg	Arg	Ser	Asp	Ala	Gly	Val	Ile	Cys	Ser	Asp	Lys	Ala
			420					425						430	
Asp	Leu	Asp	Leu	Arg	Leu	Val	Gly	Ala	His	Ser	Pro	Cys	Tyr	Gly	Arg
		435					440					445			
Leu	Glu	Val	Lys	Tyr	Gln	Gly	Glu	Trp	Gly	Thr	Val	Cys	His	Asp	Arg
	450					455					460				
Trp	Ser	Thr	Arg	Asn	Ala	Ala	Val	Val	Cys	Lys	Gln	Leu	Gly	Cys	Gly
465					470					475					480
Lys	Pro	Met	His	Val	Phe	Gly	Met	Thr	Tyr	Phe	Lys	Glu	Ala	Ser	Gly
				485					490						495
Pro	Ile	Trp	Leu	Asp	Asp	Val	Ser	Cys	Ile	Gly	Asn	Glu	Ser	Asn	Ile
			500					505						510	
Trp	Asp	Cys	Glu	His	Ser	Gly	Trp	Gly	Lys	His	Asn	Cys	Val	His	Arg
		515					520					525			
Glu	Asp	Val	Ile	Val	Thr	Cys	Ser	Gly	Asp	Ala	Thr	Trp	Gly	Leu	Arg
	530					535					540				
Leu	Val	Gly	Gly	Ser	Asn	Arg	Cys	Ser	Gly	Arg	Leu	Glu	Val	Tyr	Phe
545					550					555					560
Gln	Gly	Arg	Trp	Gly	Thr	Val	Cys	Asp	Asp	Gly	Trp	Asn	Ser	Lys	Ala
				565					570						575
Ala	Ala	Val	Val	Cys	Ser	Gln	Leu	Asp	Cys	Pro	Ser	Ser	Ile	Ile	Gly
			580					585						590	
Met	Gly	Leu	Gly	Asn	Ala	Ser	Thr	Gly	Tyr	Gly	Lys	Ile	Trp	Leu	Asp
		595					600							605	
Asp	Val	Ser	Cys	Asp	Gly	Asp	Glu	Ser	Asp	Leu	Trp	Ser	Cys	Arg	Asn
	610					615					620				
Ser	Gly	Trp	Gly	Asn	Asn	Asp	Cys	Ser	His	Ser	Glu	Asp	Val	Gly	Val

625					630					635					640
Ile	Cys	Ser	Asp	Ala	Ser	Asp	Met	Glu	Leu	Arg	Leu	Val	Gly	Gly	Ser
				645					650					655	
Ser	Arg	Cys	Ala	Gly	Lys	Val	Glu	Val	Asn	Val	Gln	Gly	Ala	Val	Gly
			660					665					670		
Ile	Leu	Cys	Ala	Asn	Gly	Trp	Gly	Met	Asn	Ile	Ala	Glu	Val	Val	Cys
		675					680					685			
Arg	Gln	Leu	Glu	Cys	Gly	Ser	Ala	Ile	Arg	Val	Ser	Arg	Glu	Pro	His
	690					695					700				
Phe	Thr	Glu	Arg	Thr	Leu	His	Ile	Leu	Met	Ser	Asn	Ser	Gly	Cys	Thr
705					710					715					720
Gly	Gly	Glu	Ala	Ser	Leu	Trp	Asp	Cys	Ile	Arg	Trp	Glu	Trp	Lys	Gln
				725					730					735	
Thr	Ala	Cys	His	Leu	Asn	Met	Glu	Ala	Ser	Leu	Ile	Cys	Ser	Ala	His
			740				745					750			
Arg	Gln	Pro	Arg	Leu	Val	Gly	Ala	Asp	Met	Pro	Cys	Ser	Gly	Arg	Val
		755					760					765			
Glu	Val	Lys	His	Ala	Asp	Thr	Trp	Arg	Ser	Val	Cys	Asp	Ser	Asp	Phe
	770					775					780				
Ser	Leu	His	Ala	Ala	Asn	Val	Leu	Cys	Arg	Glu	Leu	Asn	Cys	Gly	Asp
785					790					795					800
Ala	Ile	Ser	Leu	Ser	Val	Gly	Asp	His	Phe	Gly	Lys	Gly	Asn	Gly	Leu
				805					810					815	
Thr	Trp	Ala	Glu	Lys	Phe	Gln	Cys	Glu	Gly	Ser	Glu	Thr	His	Leu	Ala
		820						825					830		
Leu	Cys	Pro	Ile	Val	Gln	His	Pro	Glu	Asp	Thr	Cys	Ile	His	Ser	Arg
		835					840					845			
Glu	Val	Gly	Val	Val	Cys	Ser	Arg	Tyr	Thr	Asp	Val	Arg	Leu	Val	Asn
	850					855				860					
Gly	Lys	Ser	Gln	Cys	Asp	Gly	Gln	Val	Glu	Ile	Asn	Val	Leu	Gly	His
865					870					875					880
Trp	Gly	Ser	Leu	Cys	Asp	Thr	His	Trp	Asp	Pro	Glu	Asp	Ala	Arg	Val
				885					890					895	
Leu	Cys	Arg	Gln	Leu	Ser	Cys	Gly	Thr	Ala	Leu	Ser	Thr	Thr	Gly	Gly
		900					905						910		
Lys	Tyr	Ile	Gly	Glu	Arg	Ser	Val	Arg	Val	Trp	Gly	His	Arg	Phe	His
	915						920					925			
Cys	Leu	Gly	Asn	Glu	Ser	Leu	Leu	Asp	Asn	Cys	Gln	Met	Thr	Val	Leu
	930					935				940					
Gly	Ala	Pro	Pro	Cys	Ile	His	Gly	Asn	Thr	Val	Ser	Val	Ile	Cys	Thr
945					950					955					960
Gly	Ser	Leu	Thr	Gln	Pro	Leu	Phe	Pro	Cys	Leu	Ala	Asn	Val	Ser	Asp
			965						970					975	
Pro	Tyr	Leu	Ser	Ala	Val	Pro	Glu	Gly	Ser	Ala	Leu	Ile	Cys	Leu	Glu
		980					985						990		
Asp	Lys	Arg	Leu	Arg	Leu	Val	Asp	Gly	Asp	Ser	Arg	Cys	Ala	Gly	Arg
	995						1000					1005			
Val	Glu	Ile	Tyr	His	Asp	Gly	Phe	Trp	Gly	Thr	Ile	Cys	Asp	Asp	Gly
	1010					1015					1020				
Trp	Asp	Leu	Ser	Asp	Ala	His	Val	Val	Cys	Gln	Lys	Leu	Gly	Cys	Gly
1025					1030					1035					1040
Val	Ala	Phe	Asn	Ala	Thr	Val	Ser	Ala	His	Phe	Gly	Glu	Gly	Ser	Gly
				1045					1050					1055	
Pro	Ile	Trp	Leu	Asp	Asp	Leu	Asn	Cys	Thr	Gly	Thr	Glu	Ser	His	Leu
		1060						1065					1070		
Trp	Gln	Cys	Pro	Ser	Arg	Gly	Trp	Gly	Gln	His	Asp	Cys	Arg	His	Lys
		1075					1080					1085			

Glu Asp Ala Gly Val Ile Cys Ser Glu Phe Thr Ala Leu Arg Leu Tyr
 1090 1095 1100
 Ser Glu Thr Glu Thr Glu Ser Cys Ala Gly Arg Leu Glu Val Phe Tyr
 1105 1110 1115 1120
 Asn Gly Thr Trp Gly Ser Val Gly Arg Arg Asn Ile Thr Thr Ala Ile
 1125 1130 1135
 Ala Gly Ile Val Cys Arg Gln Leu Gly Cys Gly Glu Asn Gly Val Val
 1140 1145 1150
 Ser Leu Ala Pro Leu Ser Lys Thr Gly Ser Gly Phe Met Trp Val Asp
 1155 1160 1165
 Asp Ile Gln Cys Pro Lys Thr His Ile Ser Ile Trp Gln Cys Leu Ser
 1170 1175 1180
 Ala Pro Trp Glu Arg Arg Ile Ser Ser Pro Ala Glu Glu Thr Trp Ile
 1185 1190 1195 1200
 Thr Cys Glu Asp Arg Ile Arg Val Arg Gly Gly Asp Thr Glu Cys Ser
 1205 1210 1215
 Gly Arg Val Glu Ile Trp His Ala Gly Ser Trp Gly Thr Val Cys Asp
 1220 1225 1230
 Asp Ser Trp Asp Leu Ala Glu Ala Glu Val Val Cys Gln Gln Leu Gly
 1235 1240 1245
 Cys Gly Ser Ala Leu Ala Ala Leu Arg Asp Ala Ser Phe Gly Gln Gly
 1250 1255 1260
 Thr Gly Thr Ile Trp Leu Asp Asp Met Arg Cys Lys Gly Asn Glu Ser
 1265 1270 1275 1280
 Phe Leu Trp Asp Cys His Ala Lys Pro Trp Gly Gln Ser Asp Cys Gly
 1285 1290 1295
 His Lys Glu Asp Ala Gly Val Arg Cys Ser Gly Gln Ser Leu Lys Ser
 1300 1305 1310
 Leu Asn Ala Ser Ser Gly His
 1315

<210> 385
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 385
 Leu Ala Leu Ile Leu Ser Ser Ile Phe Gly Leu Leu Leu Leu Val Leu
 1 5 10 15
 Phe Ile Leu Phe Leu Thr Trp Cys
 20

<210> 386
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 386
 Arg Val Gln Lys Gln Lys His Leu Pro Leu Arg Val Ser Thr Arg Arg
 1 5 10 15
 Arg Gly Ser Leu Glu Glu Asn Leu Phe His Glu Met Glu Thr Cys Leu
 20 25 30
 Lys Arg Glu Asp Pro His Gly Thr Arg Thr Ser Asp Asp Thr Pro Asn
 35 40 45
 His Gly Cys Glu Asp Ala Ser Asp Thr Ser Leu Leu Gly Val Leu Pro

50
Ala Ser Glu Ala Thr Lys
65

55
70

60

<210> 387
<211> 3104
<212> DNA
<213> Homo sapiens

<400> 387
gtcgacccac gcgtccgggtc tgtggctgag catggccctc ccagccctgg gcctggaccc 60
ctggagcctc ctgggccttt tcctcttcca actgcttcag ctgctgctgc cgacgacgac 120
cgcgggggga ggcgggcagg ggcccatgcc cagggtcaga tactatgcag gggatgaacg 180
tagggcactt agcttcttcc accagaaggg cctccaggat ttgacactc tgctcctgag 240
tgggtgatgga aatactctct acgtgggggc tcgagaagcc attctggcct tggatatcca 300
ggatccaggg gtccccaggc taaagaacat gataccgtgg ccagccagtg acagaaaaaa 360
gagtgaatgt gcctttaaga agaagagcaa tgagacacag tgtttcaact tcatccgtgt 420
cctggtttct tacaatgtca cccatctcta cacctgcggc accttcgcct tcagccctgc 480
ttgtaccttc attgaacttc aagattccta cctgttgccc atctcggagg acaaggcat 540
ggagggaaaa ggccaaagcc cctttgaccc cgctcacaag catacggctg tcttgggtgga 600
tgggatgctc tattctggta ctatgaacaa ctctctgggc agtgagccca tcctgatgag 660
cacactggga tcccagcctg tcctcaagac cgacaacttc ctccgctggc tgcacatga 720
cgctctcttt gtggcagcca tcccttcgac ccaggctcgtc tacttcttct tcgaggagac 780
agccagcgag tttgacttct ttgagaggct ccacacatcg cgggtggcta gagtctgcaa 840
gaatgacgtg ggcggcgaaa agctgctgca gaagaagtgg accaccttc tgaaggccca 900
gctgctctgc acccagccgg ggcagctgcc ctcaacgtc atccgccacg cggctcctgt 960
ccccgcgat tctccacag ctcccccacat ctacgcagtc ttcacctccc agtggcagg 1020
tggcgggacc aggagctctg cggtttgtgc ctctctctc ttggacattg aacgtgtctt 1080
taaggggaaa tacaagagt tgaacaaaga aacttcacgc tggactactt ataggggccc 1140
tgagaccaac ccccgccag gcagttgctc agtgggcccc tcctctgata aggccctgac 1200
cttcagtgaag gaccatttcc tgatggatga gcaagtgggt gggacgcccc tgctggtgaa 1260
atctggcggt gagtatacac ggcttgaggt ggagacagcc cagggccttg atgggcacag 1320
ccatcttgct atgtacctgg gaaccaccac agggctcgtc cacaaggctg tggtaagtgg 1380
ggacagcagt gctcatctgg tgaagagat tcagctgttc cctgacctg aacctgttcg 1440
caacctgcag ctggccccc cccagggtgc agtgtttgta ggcttctcag gaggtgtctg 1500
gaggggtgcc cgagccaact gtagtgtcta tgagagctgt gtggactgtg tccttgccc 1560
ggacccccac tgtgcctggg accctgagtc ccgaacctgt tgccctcctg ctgcccccaa 1620
cctgaactcc tgggaagcagg acatggagcg ggggaaccca gagtgggcat gtgccagtgg 1680
ccccatgagc aggagccttc ggctcagag ccgcccga atcattaaag aagtcctggc 1740
tgtcccaac tccatcctgg agctcccctg ccccaacctg tcagccttgg cctcttatta 1800
ttggagtcac gggccagcag cagtcccaga agcctcttcc actgtctaca atggctccct 1860
cttgctgata gtgcaggatg gagttggggg tctctaccag tgctgggcaa ctgagaatgg 1920
cttttcatac cctgtgatct cctactgggt ggacagccag gaccagacc tggccctgga 1980
tcctgaactg gcaggcatcc cccgggagca tgtgaagggt ccgttgacca gggtcagtgg 2040
tggggccgcc ctggctgccc agcagtccta ctggccccac tttgtcactg tctactgtcct 2100
ctttgcctta gtgctttcag gagccctcat catcctcgtg gcctccccat tgagagcact 2160
ccgggctcgg ggcaagggtt agggctgtga gacctgcgc cctggggaga aggccccgtt 2220
aagcagagag caacacctcc agtctcccaa ggaatgcagg acctctgcca gtgatgtgga 2280
cgctgacaac aactgcctag gactgaggt agcttaaaact ctaggcacag gccggggctg 2340
cggtgcaggc acctggccat gctggctggg cggcccaagc acagccctga ctaggatgac 2400
agcagcacia aagaccacct ttctccccctg agaggagctt ctgctactct gcatcactga 2460
tgacactcag cagggtgatg cacagcagtc tgccctccct atgggactcc cttctaccaa 2520
gcacatgagc tctctaacag ggtgggggct acccccagac ctgctcctac actgatattg 2580
aagaacctgg agaggatcct tcagttctgg ccattccagg gacctccag aaacacagt 2640
tttcaagaga tcctaaaaaa acctgcctgt cccaggaccc tatggtaaatg aacaccaaac 2700
atctaaacaa tcatatgcta acatgccact cctggaaact ccactctgaa gctgccgctt 2760

tggacaccaa	cactcccttc	tcccagggtc	atgcagggat	ctgctccctc	ctgcttcctt	2820
taccagtcgt	gcaccgctga	ctcccaggaa	gtcttttcctg	aagtctgacc	acctttcttc	2880
ttgcttcagt	tggggcagac	tctgatccct	tctgccctgg	cagaatggca	ggggtaatct	2940
gagccttctt	cactccttta	ccctagctga	ccccttcacc	tctccccctc	ccttttcctt	3000
tgttttggga	ttcagaaaac	tgcttgtcag	agactgttta	ttttttatta	aaaatataag	3060
gcttaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaagggcgg	ccgc		3104

<210> 388
 <211> 2283
 <212> DNA
 <213> Homo sapiens

<400> 388						
atggccctcc	cagccctggg	cctggacccc	tggagcctcc	tgggcctttt	cctcttccaa	60
ctgcttcagc	tgctgctgcc	gacgacgacc	gcggggggag	gcggggcaggg	gcccattgcc	120
agggctcagat	actatgcagg	ggatgaacgt	agggcactta	gcttcttcca	ccagaagggc	180
ctccaggatt	ttgacactct	gctcctgagt	ggatgatggaa	atactctcta	cgtgggggct	240
cgagaagcca	ttctggcctt	ggatatccag	gatccagggg	tccccaggct	aaagaacatg	300
ataccgtggc	cagccagtga	cagaaaaaag	agtgaatgtg	cctttaagaa	gaagagcaat	360
gagacacagt	gtttcaactt	catccgtgtc	ctggtttctt	acaatgtcac	ccatctctac	420
acctgcggca	ccttcgcctt	cagccctgct	tgtaccttca	ttgaacttca	agattcctac	480
ctgttgcccc	tctcggagga	caaggtcatg	gagggaaaag	gccaaagccc	ctttgacccc	540
gtcacacaag	atacggctgt	cttggtggat	gggatgctct	attctggtac	tatgaacaac	600
ttcctgggca	gtgagcccat	cctgatgcgc	acactgggat	cccagcctgt	cctcaagacc	660
gacaacttcc	tccgctggct	gcacatgac	gcctcctttg	tggcagccat	cccttcgacc	720
caggtcgtct	acttcttctt	cgaggagaca	gccagcgagt	ttgacttctt	tgagaggctc	780
cacacatcgc	gggtggctag	agtctgcaag	aatgacgtgg	gcggcgaaaa	gctgctgcag	840
aagaagtggg	ccaccttcct	gaaggcccag	ctgctctgca	cccagccggg	gcagctgccc	900
ttcaacgtca	tccgccacgc	ggtcctgtct	cccgccgatt	ctcccacagc	tcccacatc	960
tacgcagtct	tcacctccca	gtggcagggt	ggcgggacca	ggagctctgc	ggtttgtgcc	1020
ttctctctct	tggacattga	acgtgtcttt	aaggggaaat	acaaagagtt	gaacaaagaa	1080
acttcacgct	ggactactta	taggggcctt	gagaccaacc	cccggccagg	cagttgtcta	1140
gtggggccct	cctctgataa	ggccctgacc	ttcatgaagg	accatttcct	gatggatgag	1200
caagtgggtg	ggacgcccc	gctggtgaaa	tctggcgtgg	agtatacacg	gcttgacgtg	1260
gagacagccc	agggccttga	tgggcacagc	catcttgtca	tgtacctggg	aaccaccaca	1320
gggtcgctcc	acaaggctgt	ggtaagtggg	gacagcagtg	ctcatctggg	ggaagagatt	1380
cagctgttcc	ctgacctga	acctgttcgc	aacctgcagc	tggccccccac	ccagggtgca	1440
gtgtttgtag	gcttctcagg	aggtgtctgg	agggtgcccc	gagccaactg	tagtgtctat	1500
gagagctgtg	tggactgtgt	ccttgccccg	gacccccact	gtgcctggga	ccctgagctc	1560
cgaacctgtt	gcctcctgtc	tgcccccaac	ctgaactcct	ggaagcagga	catggagcgg	1620
gggaacccag	agtgggcatg	tgccagtggc	cccatgagca	ggagccttcg	gcctcagagc	1680
cgcccgcaaa	tcattaaaga	agtcctggct	gtccccaaact	ccatcctgga	gctccccctg	1740
ccccacctgt	cagccttggc	ctcttattat	tggagtcatg	gcccagcagc	agtcccagaa	1800
gcctcttcca	ctgtctacaa	tggctccctc	ttgctgatag	tgcaggatgg	agttgggggt	1860
ctctaccagt	gctgggcaac	tgagaatggc	ttttcatacc	ctgtgatctc	ctactgggtg	1920
gacagccagg	accagaccct	ggccctggat	cctgaactgg	caggcatccc	ccgggagcat	1980
gtgaagggtcc	cgttgaccag	ggtcagtggt	ggggccgccc	tggctgcccc	gcagtcctac	2040
tggccccact	ttgtcactgt	cactgtcctc	tttgcccttag	tgctttcagg	agccctcatc	2100
atcctcgttg	cctccccatt	gagagcactc	cgggctcggg	gcaagggttca	gggctgtgag	2160
accctgcgcc	ctggggagaa	ggccccgtta	agcagagagc	aacacctcca	gtctcccaag	2220
gaatgcagga	cctctgccag	tgatgtggac	gctgacaaca	actgcctagg	cactgaggta	2280
gct						2283

<210> 389
 <211> 761
 <212> PRT
 <213> Homo sapiens

<400> 389

Met	Ala	Leu	Pro	Ala	Leu	Gly	Leu	Asp	Pro	Trp	Ser	Leu	Leu	Gly	Leu
1				5					10					15	
Phe	Leu	Phe	Gln	Leu	Leu	Gln	Leu	Leu	Pro	Thr	Thr	Thr	Thr	Ala	Gly
			20					25					30		
Gly	Gly	Gly	Gln	Gly	Pro	Met	Pro	Arg	Val	Arg	Tyr	Tyr	Ala	Gly	Asp
		35					40					45			
Glu	Arg	Arg	Ala	Leu	Ser	Phe	Phe	His	Gln	Lys	Gly	Leu	Gln	Asp	Phe
	50					55					60				
Asp	Thr	Leu	Leu	Leu	Ser	Gly	Asp	Gly	Asn	Thr	Leu	Tyr	Val	Gly	Ala
65					70				75						80
Arg	Glu	Ala	Ile	Leu	Ala	Leu	Asp	Ile	Gln	Asp	Pro	Gly	Val	Pro	Arg
			85						90						95
Leu	Lys	Asn	Met	Ile	Pro	Trp	Pro	Ala	Ser	Asp	Arg	Lys	Lys	Ser	Glu
		100						105					110		
Cys	Ala	Phe	Lys	Lys	Lys	Ser	Asn	Glu	Thr	Gln	Cys	Phe	Asn	Phe	Ile
		115					120					125			
Arg	Val	Leu	Val	Ser	Tyr	Asn	Val	Thr	His	Leu	Tyr	Thr	Cys	Gly	Thr
	130					135					140				
Phe	Ala	Phe	Ser	Pro	Ala	Cys	Thr	Phe	Ile	Glu	Leu	Gln	Asp	Ser	Tyr
145					150					155					160
Leu	Leu	Pro	Ile	Ser	Glu	Asp	Lys	Val	Met	Glu	Gly	Lys	Gly	Gln	Ser
			165					170						175	
Pro	Phe	Asp	Pro	Ala	His	Lys	His	Thr	Ala	Val	Leu	Val	Asp	Gly	Met
		180						185					190		
Leu	Tyr	Ser	Gly	Thr	Met	Asn	Asn	Phe	Leu	Gly	Ser	Glu	Pro	Ile	Leu
		195				200						205			
Met	Arg	Thr	Leu	Gly	Ser	Gln	Pro	Val	Leu	Lys	Thr	Asp	Asn	Phe	Leu
	210				215						220				
Arg	Trp	Leu	His	His	Asp	Ala	Ser	Phe	Val	Ala	Ala	Ile	Pro	Ser	Thr
225					230					235					240
Gln	Val	Val	Tyr	Phe	Phe	Phe	Glu	Glu	Thr	Ala	Ser	Glu	Phe	Asp	Phe
			245					250						255	
Phe	Glu	Arg	Leu	His	Thr	Ser	Arg	Val	Ala	Arg	Val	Cys	Lys	Asn	Asp
		260						265					270		
Val	Gly	Gly	Glu	Lys	Leu	Leu	Gln	Lys	Lys	Trp	Thr	Thr	Phe	Leu	Lys
	275						280					285			
Ala	Gln	Leu	Leu	Cys	Thr	Gln	Pro	Gly	Gln	Leu	Pro	Phe	Asn	Val	Ile
	290				295					300					
Arg	His	Ala	Val	Leu	Leu	Pro	Ala	Asp	Ser	Pro	Thr	Ala	Pro	His	Ile
305					310					315					320
Tyr	Ala	Val	Phe	Thr	Ser	Gln	Trp	Gln	Val	Gly	Gly	Thr	Arg	Ser	Ser
			325					330						335	
Ala	Val	Cys	Ala	Phe	Ser	Leu	Leu	Asp	Ile	Glu	Arg	Val	Phe	Lys	Gly
		340						345					350		
Lys	Tyr	Lys	Glu	Leu	Asn	Lys	Glu	Thr	Ser	Arg	Trp	Thr	Thr	Tyr	Arg
	355					360						365			
Gly	Pro	Glu	Thr	Asn	Pro	Arg	Pro	Gly	Ser	Cys	Ser	Val	Gly	Pro	Ser
	370				375						380				
Ser	Asp	Lys	Ala	Leu	Thr	Phe	Met	Lys	Asp	His	Phe	Leu	Met	Asp	Glu
385					390					395					400
Gln	Val	Val	Gly	Thr	Pro	Leu	Leu	Val	Lys	Ser	Gly	Val	Glu	Tyr	Thr
			405					410						415	
Arg	Leu	Ala	Val	Glu	Thr	Ala	Gln	Gly	Leu	Asp	Gly	His	Ser	His	Leu
		420						425					430		
Val	Met	Tyr	Leu	Gly	Thr	Thr	Thr	Gly	Ser	Leu	His	Lys	Ala	Val	Val

<212> PRT

<213> Homo sapiens

<400> 391

Gly	Gly	Gly	Gly	Gln	Gly	Pro	Met	Pro	Arg	Val	Arg	Tyr	Tyr	Ala	Gly
1				5					10					15	
Asp	Glu	Arg	Arg	Ala	Leu	Ser	Phe	Phe	His	Gln	Lys	Gly	Leu	Gln	Asp
			20					25					30		
Phe	Asp	Thr	Leu	Leu	Leu	Ser	Gly	Asp	Gly	Asn	Thr	Leu	Tyr	Val	Gly
		35					40					45			
Ala	Arg	Glu	Ala	Ile	Leu	Ala	Leu	Asp	Ile	Gln	Asp	Pro	Gly	Val	Pro
		50				55					60				
Arg	Leu	Lys	Asn	Met	Ile	Pro	Trp	Pro	Ala	Ser	Asp	Arg	Lys	Lys	Ser
65					70					75					80
Glu	Cys	Ala	Phe	Lys	Lys	Lys	Ser	Asn	Glu	Thr	Gln	Cys	Phe	Asn	Phe
				85					90					95	
Ile	Arg	Val	Leu	Val	Ser	Tyr	Asn	Val	Thr	His	Leu	Tyr	Thr	Cys	Gly
			100					105						110	
Thr	Phe	Ala	Phe	Ser	Pro	Ala	Cys	Thr	Phe	Ile	Glu	Leu	Gln	Asp	Ser
		115					120					125			
Tyr	Leu	Leu	Pro	Ile	Ser	Glu	Asp	Lys	Val	Met	Glu	Gly	Lys	Gly	Gln
		130				135					140				
Ser	Pro	Phe	Asp	Pro	Ala	His	Lys	His	Thr	Ala	Val	Leu	Val	Asp	Gly
145					150					155					160
Met	Leu	Tyr	Ser	Gly	Thr	Met	Asn	Asn	Phe	Leu	Gly	Ser	Glu	Pro	Ile
				165					170					175	
Leu	Met	Arg	Thr	Leu	Gly	Ser	Gln	Pro	Val	Leu	Lys	Thr	Asp	Asn	Phe
			180					185					190		
Leu	Arg	Trp	Leu	His	His	Asp	Ala	Ser	Phe	Val	Ala	Ala	Ile	Pro	Ser
		195					200					205			
Thr	Gln	Val	Val	Tyr	Phe	Phe	Phe	Glu	Glu	Thr	Ala	Ser	Glu	Phe	Asp
		210					215					220			
Phe	Phe	Glu	Arg	Leu	His	Thr	Ser	Arg	Val	Ala	Arg	Val	Cys	Lys	Asn
225					230					235					240
Asp	Val	Gly	Gly	Glu	Lys	Leu	Leu	Gln	Lys	Lys	Trp	Thr	Thr	Phe	Leu
				245					250					255	
Lys	Ala	Gln	Leu	Leu	Cys	Thr	Gln	Pro	Gly	Gln	Leu	Pro	Phe	Asn	Val
			260					265						270	
Ile	Arg	His	Ala	Val	Leu	Leu	Pro	Ala	Asp	Ser	Pro	Thr	Ala	Pro	His
		275					280					285			
Ile	Tyr	Ala	Val	Phe	Thr	Ser	Gln	Trp	Gln	Val	Gly	Gly	Thr	Arg	Ser
		290				295					300				
Ser	Ala	Val	Cys	Ala	Phe	Ser	Leu	Leu	Asp	Ile	Glu	Arg	Val	Phe	Lys
305					310					315					320
Gly	Lys	Tyr	Lys	Glu	Leu	Asn	Lys	Glu	Thr	Ser	Arg	Trp	Thr	Thr	Tyr
				325					330					335	
Arg	Gly	Pro	Glu	Thr	Asn	Pro	Arg	Pro	Gly	Ser	Cys	Ser	Val	Gly	Pro
			340					345						350	
Ser	Ser	Asp	Lys	Ala	Leu	Thr	Phe	Met	Lys	Asp	His	Phe	Leu	Met	Asp
		355					360					365			
Glu	Gln	Val	Val	Gly	Thr	Pro	Leu	Leu	Val	Lys	Ser	Gly	Val	Glu	Tyr
		370				375					380				
Thr	Arg	Leu	Ala	Val	Glu	Thr	Ala	Gln	Gly	Leu	Asp	Gly	His	Ser	His
385					390						395				400
Leu	Val	Met	Tyr	Leu	Gly	Thr	Thr	Thr	Gly	Ser	Leu	His	Lys	Ala	Val
				405					410					415	
Val	Ser	Gly	Asp	Ser	Ser	Ala	His	Leu	Val	Glu	Glu	Ile	Gln	Leu	Phe

Glu	Cys	Ala	Phe	Lys	Lys	Lys	Ser	Asn	Glu	Thr	Gln	Cys	Phe	Asn	Phe	
			85						90					95		
Ile	Arg	Val	Leu	Val	Ser	Tyr	Asn	Val	Thr	His	Leu	Tyr	Thr	Cys	Gly	
			100					105						110		
Thr	Phe	Ala	Phe	Ser	Pro	Ala	Cys	Thr	Phe	Ile	Glu	Leu	Gln	Asp	Ser	
			115					120					125			
Tyr	Leu	Leu	Pro	Ile	Ser	Glu	Asp	Lys	Val	Met	Glu	Gly	Lys	Gly	Gln	
			130				135					140				
Ser	Pro	Phe	Asp	Pro	Ala	His	Lys	His	Thr	Ala	Val	Leu	Val	Asp	Gly	
145					150					155					160	
Met	Leu	Tyr	Ser	Gly	Thr	Met	Asn	Asn	Phe	Leu	Gly	Ser	Glu	Pro	Ile	
				165					170					175		
Leu	Met	Arg	Thr	Leu	Gly	Ser	Gln	Pro	Val	Leu	Lys	Thr	Asp	Asn	Phe	
			180					185						190		
Leu	Arg	Trp	Leu	His	His	Asp	Ala	Ser	Phe	Val	Ala	Ala	Ile	Pro	Ser	
			195				200						205			
Thr	Gln	Val	Val	Tyr	Phe	Phe	Phe	Glu	Glu	Thr	Ala	Ser	Glu	Phe	Asp	
			210				215					220				
Phe	Phe	Glu	Arg	Leu	His	Thr	Ser	Arg	Val	Ala	Arg	Val	Cys	Lys	Asn	
225					230					235					240	
Asp	Val	Gly	Gly	Glu	Lys	Leu	Leu	Gln	Lys	Lys	Trp	Thr	Thr	Phe	Leu	
				245					250					255		
Lys	Ala	Gln	Leu	Leu	Cys	Thr	Gln	Pro	Gly	Gln	Leu	Pro	Phe	Asn	Val	
			260					265						270		
Ile	Arg	His	Ala	Val	Leu	Leu	Pro	Ala	Asp	Ser	Pro	Thr	Ala	Pro	His	
			275				280						285			
Ile	Tyr	Ala	Val	Phe	Thr	Ser	Gln	Trp	Gln	Val	Gly	Gly	Thr	Arg	Ser	
			290				295					300				
Ser	Ala	Val	Cys	Ala	Phe	Ser	Leu	Leu	Asp	Ile	Glu	Arg	Val	Phe	Lys	
305					310					315					320	
Gly	Lys	Tyr	Lys	Glu	Leu	Asn	Lys	Glu	Thr	Ser	Arg	Trp	Thr	Thr	Tyr	
				325					330					335		
Arg	Gly	Pro	Glu	Thr	Asn	Pro	Arg	Pro	Gly	Ser	Cys	Ser	Val	Gly	Pro	
			340					345						350		
Ser	Ser	Asp	Lys	Ala	Leu	Thr	Phe	Met	Lys	Asp	His	Phe	Leu	Met	Asp	
			355				360					365				
Glu	Gln	Val	Val	Gly	Thr	Pro	Leu	Leu	Val	Lys	Ser	Gly	Val	Glu	Tyr	
			370			375						380				
Thr	Arg	Leu	Ala	Val	Glu	Thr	Ala	Gln	Gly	Leu	Asp	Gly	His	Ser	His	
385					390					395					400	
Leu	Val	Met	Tyr	Leu	Gly	Thr	Thr	Thr	Gly	Ser	Leu	His	Lys	Ala	Val	
				405					410					415		
Val	Ser	Gly	Asp	Ser	Ser	Ala	His	Leu	Val	Glu	Glu	Ile	Gln	Leu	Phe	
			420					425					430			
Pro	Asp	Pro	Glu	Pro	Val	Arg	Asn	Leu	Gln	Leu	Ala	Pro	Thr	Gln	Gly	
			435				440						445			
Ala	Val	Phe	Val	Gly	Phe	Ser	Gly	Gly	Val	Trp	Arg	Val	Pro	Arg	Ala	
			450				455				460					
Asn	Cys	Ser	Val	Tyr	Glu	Ser	Cys	Val	Asp	Cys	Val	Leu	Ala	Arg	Asp	
465					470					475					480	
Pro	His	Cys	Ala	Trp	Asp	Pro	Glu	Ser	Arg	Thr	Cys	Cys	Leu	Leu	Ser	
				485					490					495		
Ala	Pro	Asn	Leu	Asn	Ser	Trp	Lys	Gln	Asp	Met	Glu	Arg	Gly	Asn	Pro	
			500					505					510			
Glu	Trp	Ala	Cys	Ala	Ser	Gly	Pro	Met	Ser	Arg	Ser	Leu	Arg	Pro	Gln	
			515				520					525				
Ser	Arg	Pro	Gln	Ile	Ile	Lys	Glu	Val	Leu	Ala	Val	Pro	Asn	Ser	Ile	

530		535		540											
Leu	Glu	Leu	Pro	Cys	Pro	His	Leu	Ser	Ala	Leu	Ala	Ser	Tyr	Tyr	Trp
545		550		555						555					560
Ser	His	Gly	Pro	Ala	Ala	Val	Pro	Glu	Ala	Ser	Ser	Thr	Val	Tyr	Asn
		565		570											575
Gly	Ser	Leu	Leu	Ile	Val	Gln	Asp	Gly	Val	Gly	Gly	Leu	Tyr	Gln	
		580		585											590
Cys	Trp	Ala	Thr	Glu	Asn	Gly	Phe	Ser	Tyr	Pro	Val	Ile	Ser	Tyr	Trp
		595		600											605
Val	Asp	Ser	Gln	Asp	Gln	Thr	Leu	Ala	Leu	Asp	Pro	Glu	Leu	Ala	Gly
		610		615											620
Ile	Pro	Arg	Glu	His	Val	Lys	Val	Pro	Leu	Thr	Arg	Val	Ser	Gly	Gly
		625		630											640
Ala	Ala	Leu	Ala	Ala	Gln	Gln	Ser	Tyr	Trp	Pro	His				
		645		650											

<210> 393
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 393
 Phe Val Thr Val Thr Val Leu Phe Ala Leu Val Leu Ser Gly Ala Leu
 1 5 10 15
 Ile Ile Leu Val Ala
 20

<210> 394
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 394
 Ser Pro Leu Arg Ala Leu Arg Ala Arg Gly Lys Val Gln Gly Cys Glu
 1 5 10 15
 Thr Leu Arg Pro Gly Glu Lys Ala Pro Leu Ser Arg Glu Gln His Leu
 20 25 30
 Gln Ser Pro Lys Glu Cys Arg Thr Ser Ala Ser Asp Val Asp Ala Asp
 35 40 45
 Asn Asn Cys Leu Gly Thr Glu Val Ala
 50 55

<210> 395
 <220>
 <223> Unknown

<400> 395
 000

<210> 396
 <220>
 <223> Unknown

<400> 396
 000
 <210> 397
 <220>
 <223> Unknown
 <400> 397
 000
 <210> 398
 <220>
 <223> Unknown
 <400> 398
 000
 <210> 399
 <220>
 <223> Unknown
 <400> 399
 000
 <210> 400
 <220>
 <223> Unknown
 <400> 400
 000
 <210> 401
 <220>
 <223> Unknown
 <400> 401
 000
 <210> 402
 <220>
 <223> Unknown
 <400> 402
 000
 <210> 403
 <211> 1980
 <212> DNA
 <213> Homo sapiens

<400> 403

gtcgacccac	gcgctccgcag	ctttggacac	ttcctctgct	tgaggacacc	ttgactaacc	60
tccaagggca	actaaaggat	caagaaaggc	ccagcacagc	agaagatcag	ctggatctag	120
ctcctgcagg	agatgtgtac	aaagacaatc	ccagtcctct	ggggatgttt	cctcctgtgg	180
aatctctatg	tctcatcctc	tcagaccatt	taccctggaa	tcaaggcaag	gattactcag	240
agggcacttg	actatgggtg	tcaagctgga	atgaagatga	ttgagcaa	gctaaaagaa	300
aagaaactcc	cagattttaag	cggttctgag	tctcttgaat	ttctaaaagt	tgattatgta	360
aactacaatt	tttcaaatat	aaaaatcagt	gccttttcat	ttccaaatac	ctcattggct	420
tttgtgcctg	gagtgggaat	caaagcgcta	accaaccatg	gcactgccaa	catcagcaca	480
gactgggggt	tcgagtctcc	actttttgtt	ctgtataact	cctttgctga	gcccattggag	540
aaaccatttt	taaagaactt	aaatgaaatg	ctctgtccca	ttattgcaag	tgaagtcaaa	600
gcgctaaatg	ccaacctcag	cacactggag	gttttaacca	agattgacaa	ctacactctg	660
ctggattact	ccctaatacag	ttctccagaa	attactgaga	actaccttga	cctgaacttg	720
aaagggtgat	tctaccccat	ggaaaacctc	accgaccccc	ccttctcacc	agttcctttt	780
gtgctcccag	aacgcagcaa	ctccatgctc	tacattggaa	tcgcccagta	tttctttaaa	840
tctgcgtcct	ttgctcattt	cacagctggg	gttttcaatc	tcactctctc	caccgaagag	900
atltccaacc	atlttgttca	aaactctcaa	ggccttggca	acgtgctctc	ccggattgca	960
gagatctaca	tcttgtccca	gcccttcatg	gtgaggatca	tggccacaga	gcctcccata	1020
atcaatctac	aaccaggcaa	tttcaccctg	gacatccctg	cctccatcat	gatgctcacc	1080
caaccaaga	actccacagt	tgaaccatc	gtttccatgg	acttcgttgc	tagtaccagt	1140
gttggcctgg	ttattttggg	acaaagactg	gtctgtcctt	tgtctctgaa	cagattccgc	1200
cttgcttttg	cagagtccaa	tcgcagcaac	attgaggtct	tgaggtttga	aaatattcta	1260
tcgtccattc	ttcactttgg	agtcctccca	ctggccaatg	caaaattgca	gcaaggattt	1320
cctctgcccc	atccacacaa	attcttattc	gtcaattcag	atattgaagt	tcttgagggt	1380
ttccttttga	tttccaccga	cctgaagtat	gaaacatcct	caaagcagca	gccaaagttt	1440
cacgtatggg	aaggctctgaa	cctgataagc	agacagtggg	gggggaagtc	agccccttga	1500
ttgccgggtt	gcaattcacc	ccaggaagta	aatgggtcct	aatcctacaa	ctactgtaaa	1560
cccagaaggg	aaagacagta	cacactggaa	ttgtaaagcc	cctgtgaatt	gcttaggcag	1620
aaagttttct	ttcttaagcc	ttcaggaacc	cagaataagg	cagactctgt	taaagggata	1680
aatagagggt	tctgaatgtg	agtgtatgca	tgctgcgtgt	gtctgtgttt	atgtttgttt	1740
gtttgttttg	ggcaagaaag	attctaggac	aagagctagg	catgtacttc	tgaccagggt	1800
ggtaagcaac	tctaagctctg	tatttgtatt	ggctattctc	agtggaaatc	ccttaggcc	1860
tctagtgggt	ttccccctacc	tgcataattg	ttttcatgtt	ttatattcac	tggtactatc	1920
ttctgtgttt	aattaaaatt	gttttctatc	aaaaaaaaaa	aaaaaaaaaa	gggcggccgc	1980

<210> 404

<211> 1365

<212> DNA

<213> Homo sapiens

<400> 404

atgtgtacaa	agacaatccc	agtcctctgg	ggatgtttcc	tctgtggaa	tctctatgtc	60
tcatcctctc	agaccattta	ccctggaatc	aaggcaagga	ttactcagag	ggcacttgac	120
tatggtgttc	aagctggaat	gaagatgatt	gagcaaattg	taaaagaaaa	gaaactccca	180
gatttaagcg	gttctgagtc	tcttgaattt	ctaaaagtgt	attatgtaaa	ctacaatttt	240
tcaaatataa	aaatcagtg	cttttcattt	ccaaatacct	cattggcttt	tgtgcctgga	300
gtgggaatca	aagcgctaac	caaccatggc	actgccaaca	tcagcacaga	ctgggggttc	360
gagctccac	ttttgttct	gtataactcc	tttgcctgag	ccatggagaa	acccatttta	420
aagaacttaa	atgaaatgct	ctgtcccat	attgcaagt	aagtcaaagc	gctaaatgcc	480
aacctcagca	cactggaggt	tttaaccaag	attgacaact	acactctgct	ggattactcc	540
ctaatacagt	ctccagaaat	tactgagaac	taccttgacc	tgaacttgaa	gggtgtattc	600
taccacttgg	aaaacctcac	cgaccccccc	ttctcaccag	ttccttttgt	gctcccagaa	660
cgcagcaact	ccatgctcta	cattggaatc	gccaggtatt	tctttaaatc	tgcgtccttt	720
gctcatttca	cagctggggg	tttcaatctc	actctctcca	ccgaagagat	ttccaacat	780
tttgttcaaa	actctcaagg	ccttggcaac	gtgctctccc	ggattgcaga	gatctacatc	840
ttgtcccagc	ccttcatggg	gaggatcatg	gccacagagc	ctcccataat	caatctacaa	900

```

ccaggcaatt tcaccctgga catccctgcc tccatcatga tgctcaccga acccaagaac 960
tccacagttg aaaccatcgt ttccatggac ttcgttgcta gtaccagtgt tggcctgggt 1020
atattgggac aaagactggg ctgctccttg tctctgaaca gattccgcct tgctttgcca 1080
gagtcgaatc gcagcaacat tgaggctctg aggtttgaaa atattctatc gtccattctt 1140
cactttggag tcctcccact ggccaatgca aaattgcagc aaggatttcc tctgccaat 1200
ccacacaaat tcttattcgt caattcagat attgaagttc ttgaggggtt ccttttgatt 1260
tccaccgacc tgaagtatga aacatcctca aagcagcagc caagtttcca cgtatgggaa 1320
ggctctgaacc tgataagcag acagtggagg gggaagtcag cccct 1365

```

<210> 405
 <211> 455
 <212> PRT
 <213> Homo sapiens

```

<400> 405
Met Cys Thr Lys Thr Ile Pro Val Leu Trp Gly Cys Phe Leu Leu Trp
 1          5          10          15
Asn Leu Tyr Val Ser Ser Ser Gln Thr Ile Tyr Pro Gly Ile Lys Ala
 20          25          30
Arg Ile Thr Gln Arg Ala Leu Asp Tyr Gly Val Gln Ala Gly Met Lys
 35          40          45
Met Ile Glu Gln Met Leu Lys Glu Lys Lys Leu Pro Asp Leu Ser Gly
 50          55          60
Ser Glu Ser Leu Glu Phe Leu Lys Val Asp Tyr Val Asn Tyr Asn Phe
 65          70          75          80
Ser Asn Ile Lys Ile Ser Ala Phe Ser Phe Pro Asn Thr Ser Leu Ala
 85          90          95
Phe Val Pro Gly Val Gly Ile Lys Ala Leu Thr Asn His Gly Thr Ala
100          105          110
Asn Ile Ser Thr Asp Trp Gly Phe Glu Ser Pro Leu Phe Val Leu Tyr
115          120          125
Asn Ser Phe Ala Glu Pro Met Glu Lys Pro Ile Leu Lys Asn Leu Asn
130          135          140
Glu Met Leu Cys Pro Ile Ile Ala Ser Glu Val Lys Ala Leu Asn Ala
145          150          155          160
Asn Leu Ser Thr Leu Glu Val Leu Thr Lys Ile Asp Asn Tyr Thr Leu
165          170          175
Leu Asp Tyr Ser Leu Ile Ser Ser Pro Glu Ile Thr Glu Asn Tyr Leu
180          185          190
Asp Leu Asn Leu Lys Gly Val Phe Tyr Pro Leu Glu Asn Leu Thr Asp
195          200          205
Pro Pro Phe Ser Pro Val Pro Phe Val Leu Pro Glu Arg Ser Asn Ser
210          215          220
Met Leu Tyr Ile Gly Ile Ala Glu Tyr Phe Phe Lys Ser Ala Ser Phe
225          230          235          240
Ala His Phe Thr Ala Gly Val Phe Asn Leu Thr Leu Ser Thr Glu Glu
245          250          255
Ile Ser Asn His Phe Val Gln Asn Ser Gln Gly Leu Gly Asn Val Leu
260          265          270
Ser Arg Ile Ala Glu Ile Tyr Ile Leu Ser Gln Pro Phe Met Val Arg
275          280          285
Ile Met Ala Thr Glu Pro Pro Ile Ile Asn Leu Gln Pro Gly Asn Phe
290          295          300
Thr Leu Asp Ile Pro Ala Ser Ile Met Met Leu Thr Gln Pro Lys Asn
305          310          315          320
Ser Thr Val Glu Thr Ile Val Ser Met Asp Phe Val Ala Ser Thr Ser
325          330          335

```

Val	Gly	Leu	Val	Ile	Leu	Gly	Gln	Arg	Leu	Val	Cys	Ser	Leu	Ser	Leu
		340						345					350		
Asn	Arg	Phe	Arg	Leu	Ala	Leu	Pro	Glu	Ser	Asn	Arg	Ser	Asn	Ile	Glu
		355					360					365			
Val	Leu	Arg	Phe	Glu	Asn	Ile	Leu	Ser	Ser	Ile	Leu	His	Phe	Gly	Val
	370					375					380				
Leu	Pro	Leu	Ala	Asn	Ala	Lys	Leu	Gln	Gln	Gly	Phe	Pro	Leu	Pro	Asn
385					390					395					400
Pro	His	Lys	Phe	Leu	Phe	Val	Asn	Ser	Asp	Ile	Glu	Val	Leu	Glu	Gly
			405						410					415	
Phe	Leu	Leu	Ile	Ser	Thr	Asp	Leu	Lys	Tyr	Glu	Thr	Ser	Ser	Lys	Gln
			420					425					430		
Gln	Pro	Ser	Phe	His	Val	Trp	Glu	Gly	Leu	Asn	Leu	Ile	Ser	Arg	Gln
		435					440					445			
Trp	Arg	Gly	Lys	Ser	Ala	Pro									
	450					455									

<210> 406
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400>	406														
Met	Cys	Thr	Lys	Thr	Ile	Pro	Val	Leu	Trp	Gly	Cys	Phe	Leu	Leu	Trp
1				5					10					15	
Asn	Leu	Tyr	Val	Ser	Ser	Ser									
			20												

<210> 407
 <211> 432
 <212> PRT
 <213> Homo sapiens

<400>	407														
Gln	Thr	Ile	Tyr	Pro	Gly	Ile	Lys	Ala	Arg	Ile	Thr	Gln	Arg	Ala	Leu
1				5					10					15	
Asp	Tyr	Gly	Val	Gln	Ala	Gly	Met	Lys	Met	Ile	Glu	Gln	Met	Leu	Lys
		20					25					30			
Glu	Lys	Lys	Leu	Pro	Asp	Leu	Ser	Gly	Ser	Glu	Ser	Leu	Glu	Phe	Leu
	35					40					45				
Lys	Val	Asp	Tyr	Val	Asn	Tyr	Asn	Phe	Ser	Asn	Ile	Lys	Ile	Ser	Ala
	50				55					60					
Phe	Ser	Phe	Pro	Asn	Thr	Ser	Leu	Ala	Phe	Val	Pro	Gly	Val	Gly	Ile
65					70				75					80	
Lys	Ala	Leu	Thr	Asn	His	Gly	Thr	Ala	Asn	Ile	Ser	Thr	Asp	Trp	Gly
			85				90						95		
Phe	Glu	Ser	Pro	Leu	Phe	Val	Leu	Tyr	Asn	Ser	Phe	Ala	Glu	Pro	Met
			100				105					110			
Glu	Lys	Pro	Ile	Leu	Lys	Asn	Leu	Asn	Glu	Met	Leu	Cys	Pro	Ile	Ile
	115					120					125				
Ala	Ser	Glu	Val	Lys	Ala	Leu	Asn	Ala	Asn	Leu	Ser	Thr	Leu	Glu	Val
	130					135					140				
Leu	Thr	Lys	Ile	Asp	Asn	Tyr	Thr	Leu	Leu	Asp	Tyr	Ser	Leu	Ile	Ser
145					150				155					160	
Ser	Pro	Glu	Ile	Thr	Glu	Asn	Tyr	Leu	Asp	Leu	Asn	Leu	Lys	Gly	Val

				165					170				175				
Phe	Tyr	Pro	Leu	Glu	Asn	Leu	Thr	Asp	Pro	Pro	Phe	Ser	Pro	Val	Pro		
			180					185					190				
Phe	Val	Leu	Pro	Glu	Arg	Ser	Asn	Ser	Met	Leu	Tyr	Ile	Gly	Ile	Ala		
		195						200					205				
Glu	Tyr	Phe	Phe	Lys	Ser	Ala	Ser	Phe	Ala	His	Phe	Thr	Ala	Gly	Val		
	210					215					220						
Phe	Asn	Leu	Thr	Leu	Ser	Thr	Glu	Glu	Ile	Ser	Asn	His	Phe	Val	Gln		
225					230					235					240		
Asn	Ser	Gln	Gly	Leu	Gly	Asn	Val	Leu	Ser	Arg	Ile	Ala	Glu	Ile	Tyr		
			245					250					255				
Ile	Leu	Ser	Gln	Pro	Phe	Met	Val	Arg	Ile	Met	Ala	Thr	Glu	Pro	Pro		
		260						265					270				
Ile	Ile	Asn	Leu	Gln	Pro	Gly	Asn	Phe	Thr	Leu	Asp	Ile	Pro	Ala	Ser		
	275						280					285					
Ile	Met	Met	Leu	Thr	Gln	Pro	Lys	Asn	Ser	Thr	Val	Glu	Thr	Ile	Val		
	290				295					300							
Ser	Met	Asp	Phe	Val	Ala	Ser	Thr	Ser	Val	Gly	Leu	Val	Ile	Leu	Gly		
305					310					315					320		
Gln	Arg	Leu	Val	Cys	Ser	Leu	Ser	Leu	Asn	Arg	Phe	Arg	Leu	Ala	Leu		
			325						330					335			
Pro	Glu	Ser	Asn	Arg	Ser	Asn	Ile	Glu	Val	Leu	Arg	Phe	Glu	Asn	Ile		
		340						345					350				
Leu	Ser	Ser	Ile	Leu	His	Phe	Gly	Val	Leu	Pro	Leu	Ala	Asn	Ala	Lys		
	355					360						365					
Leu	Gln	Gln	Gly	Phe	Pro	Leu	Pro	Asn	Pro	His	Lys	Phe	Leu	Phe	Val		
	370					375				380							
Asn	Ser	Asp	Ile	Glu	Val	Leu	Glu	Gly	Phe	Leu	Leu	Ile	Ser	Thr	Asp		
385				390					395						400		
Leu	Lys	Tyr	Glu	Thr	Ser	Ser	Lys	Gln	Gln	Pro	Ser	Phe	His	Val	Trp		
			405					410						415			
Glu	Gly	Leu	Asn	Leu	Ile	Ser	Arg	Gln	Trp	Arg	Gly	Lys	Ser	Ala	Pro		
		420						425					430				

<210> 408
 <211> 483
 <212> PRT
 <213> Homo sapiens

<400> 408

Met	Ala	Arg	Gly	Pro	Cys	Asn	Ala	Pro	Arg	Trp	Val	Ser	Leu	Met	Val		
1				5				10					15				
Leu	Val	Ala	Ile	Gly	Thr	Ala	Val	Thr	Ala	Ala	Val	Asn	Pro	Gly	Val		
		20						25				30					
Val	Val	Arg	Ile	Ser	Gln	Lys	Gly	Leu	Asp	Tyr	Ala	Ser	Gln	Gln	Gly		
	35					40					45						
Thr	Ala	Ala	Leu	Gln	Lys	Glu	Leu	Lys	Arg	Ile	Lys	Ile	Pro	Asp	Tyr		
	50				55					60							
Ser	Asp	Ser	Phe	Lys	Ile	Lys	His	Leu	Gly	Lys	Gly	His	Tyr	Ser	Phe		
65				70				75						80			
Tyr	Ser	Met	Asp	Ile	Arg	Glu	Phe	Gln	Leu	Pro	Ser	Ser	Gln	Ile	Ser		
		85						90					95				
Met	Val	Pro	Asn	Val	Gly	Leu	Lys	Phe	Ser	Ile	Ser	Asn	Ala	Asn	Ile		
	100							105					110				
Lys	Ile	Ser	Gly	Lys	Trp	Lys	Ala	Gln	Lys	Arg	Phe	Leu	Lys	Met	Ser		
	115						120					125					

Gly	Asn	Phe	Asp	Leu	Ser	Ile	Glu	Gly	Met	Ser	Ile	Ser	Ala	Asp	Leu
130						135					140				
Lys	Leu	Gly	Ser	Asn	Pro	Thr	Ser	Gly	Lys	Pro	Thr	Ile	Thr	Cys	Ser
145					150					155					160
Ser	Cys	Ser	Ser	His	Ile	Asn	Ser	Val	His	Val	His	Ile	Ser	Lys	Ser
				165					170					175	
Lys	Val	Gly	Trp	Leu	Ile	Gln	Leu	Phe	His	Lys	Lys	Ile	Glu	Ser	Ala
			180					185					190		
Leu	Arg	Asn	Lys	Met	Asn	Ser	Gln	Val	Cys	Glu	Lys	Val	Thr	Asn	Ser
		195					200					205			
Val	Ser	Ser	Lys	Leu	Gln	Pro	Tyr	Phe	Gln	Thr	Leu	Pro	Val	Met	Thr
	210				215						220				
Lys	Ile	Asp	Ser	Val	Ala	Gly	Ile	Asn	Tyr	Gly	Leu	Val	Ala	Pro	Pro
225					230					235					240
Ala	Thr	Thr	Ala	Glu	Thr	Leu	Asp	Val	Gln	Met	Lys	Gly	Glu	Phe	Tyr
				245					250					255	
Ser	Glu	Asn	His	His	Asn	Pro	Pro	Pro	Phe	Ala	Pro	Pro	Val	Met	Glu
			260					265					270		
Phe	Pro	Ala	Ala	His	Asp	Arg	Met	Val	Tyr	Leu	Gly	Leu	Ser	Asp	Tyr
		275					280					285			
Phe	Phe	Asn	Thr	Ala	Gly	Leu	Val	Tyr	Gln	Glu	Ala	Gly	Val	Leu	Lys
	290				295						300				
Met	Thr	Leu	Arg	Asp	Asp	Met	Ile	Pro	Lys	Glu	Ser	Lys	Phe	Arg	Leu
305					310					315					320
Thr	Thr	Lys	Phe	Phe	Gly	Thr	Phe	Leu	Pro	Glu	Val	Ala	Lys	Lys	Phe
				325					330					335	
Pro	Asn	Met	Lys	Ile	Gln	Ile	His	Val	Ser	Ala	Ser	Thr	Pro	Pro	His
			340					345					350		
Leu	Ser	Val	Gln	Pro	Thr	Gly	Leu	Thr	Phe	Tyr	Pro	Ala	Val	Asp	Val
		355					360					365			
Gln	Ala	Phe	Ala	Val	Leu	Pro	Asn	Ser	Ser	Leu	Ala	Ser	Leu	Phe	Leu
	370					375					380				
Ile	Gly	Met	His	Thr	Thr	Gly	Ser	Met	Glu	Val	Ser	Ala	Glu	Ser	Asn
385					390					395					400
Arg	Leu	Val	Gly	Glu	Leu	Lys	Leu	Asp	Arg	Leu	Leu	Leu	Glu	Leu	Lys
				405					410					415	
His	Ser	Asn	Ile	Gly	Pro	Phe	Pro	Val	Glu	Leu	Leu	Gln	Asp	Ile	Met
			420					425					430		
Asn	Tyr	Ile	Val	Pro	Ile	Leu	Val	Leu	Pro	Arg	Val	Asn	Glu	Lys	Leu
		435					440					445			
Gln	Lys	Gly	Phe	Pro	Leu	Pro	Thr	Pro	Ala	Arg	Val	Gln	Leu	Tyr	Asn
	450					455					460				
Val	Val	Leu	Gln	Pro	His	Gln	Asn	Phe	Leu	Leu	Phe	Gly	Ala	Asp	Val
465					470					475					480
Val	Tyr	Lys													

<210> 409
 <211> 481
 <212> PRT
 <213> Homo sapiens

<400> 409
 Met Gly Ala Leu Ala Arg Ala Leu Pro Ser Ile Leu Leu Ala Leu Leu
 1 5 10 15
 Leu Thr Ser Thr Pro Glu Ala Leu Gly Ala Asn Pro Gly Leu Val Ala

Lys

<210> 410
 <211> 383
 <212> PRT
 <213> Homo sapiens

<400> 410
 Met Arg Ile Ala His Ala Ser Ser Arg Gly Asn Ile Ser Ile Phe Ser
 1 5 10 15
 Val Phe Leu Ile Pro Leu Ile Ala Tyr Ile Leu Ile Leu Pro Gly Val
 20 25 30
 Arg Arg Lys Arg Val Val Thr Thr Val Thr Tyr Val Leu Met Leu Ala
 35 40 45
 Val Gly Gly Ala Leu Ile Ala Ser Leu Ile Tyr Pro Cys Trp Ala Ser
 50 55 60
 Gly Ser Gln Met Ile Tyr Thr Gln Phe Arg Gly His Ser Asn Glu Arg
 65 70 75 80
 Ile Leu Ala Lys Ile Gly Val Glu Ile Gly Leu Gln Lys Val Asn Val
 85 90 95
 Thr Leu Lys Phe Glu Arg Leu Leu Ser Ser Asn Asp Val Leu Pro Gly
 100 105 110
 Ser Asp Met Thr Glu Leu Tyr Tyr Asn Glu Gly Phe Asp Ile Ser Gly
 115 120 125
 Ile Ser Ser Met Ala Glu Ala Leu His His Gly Leu Glu Asn Gly Leu
 130 135 140
 Pro Tyr Pro Met Leu Ser Val Leu Glu Tyr Phe Ser Leu Asn Gln Asp
 145 150 155 160
 Ser Phe Asp Trp Gly Arg His Tyr Arg Val Ala Gly His Tyr Thr His
 165 170 175
 Ala Ala Ile Trp Phe Ala Phe Ala Cys Trp Cys Leu Ser Val Val Leu
 180 185 190
 Met Leu Phe Leu Pro His Asn Ala Tyr Lys Ser Ile Leu Ala Thr Gly
 195 200 205
 Ile Ser Cys Leu Ile Ala Cys Leu Val Tyr Leu Leu Leu Ser Pro Cys
 210 215 220
 Glu Leu Arg Ile Ala Phe Thr Gly Glu Asn Phe Glu Arg Val Asp Leu
 225 230 235 240
 Thr Ala Thr Phe Ser Phe Cys Phe Tyr Leu Ile Phe Ala Ile Gly Ile
 245 250 255
 Leu Cys Val Leu Cys Gly Leu Gly Leu Gly Ile Cys Glu His Trp Arg
 260 265 270
 Ile Tyr Thr Leu Ser Thr Phe Leu Asp Ala Ser Leu Asp Glu His Val
 275 280 285
 Gly Pro Lys Trp Lys Lys Leu Pro Thr Gly Gly Pro Ala Leu Gln Gly
 290 295 300
 Val Gln Ile Gly Ala Tyr Gly Thr Asn Thr Thr Asn Ser Ser Arg Asp
 305 310 315 320
 Lys Asn Asp Ile Ser Ser Asp Lys Thr Ala Gly Ser Ser Gly Phe Gln
 325 330 335
 Ser Arg Thr Ser Thr Cys Gln Ser Ser Ala Ser Ser Ala Ser Leu Arg
 340 345 350
 Ser Gln Ser Ser Ile Glu Thr Val His Asp Glu Ala Glu Leu Glu Arg
 355 360 365
 Thr His Val His Phe Leu Gln Glu Pro Cys Ser Ser Ser Ser Thr

370

375

380

<210> 411
 <211> 399
 <212> PRT
 <213> Homo sapiens

<400> 411

Met	Lys	Met	Arg	Phe	Leu	Gly	Leu	Val	Val	Cys	Leu	Val	Leu	Trp	Pro
1				5					10					15	
Leu	His	Ser	Glu	Gly	Ser	Gly	Gly	Lys	Leu	Thr	Ala	Val	Asp	Pro	Glu
			20					25					30		
Thr	Asn	Met	Asn	Val	Ser	Glu	Ile	Ser	Tyr	Trp	Gly	Phe	Pro	Ser	
		35					40				45				
Glu	Glu	Tyr	Leu	Val	Glu	Thr	Glu	Asp	Gly	Tyr	Ile	Leu	Cys	Leu	Asn
	50					55					60				
Arg	Ile	Pro	His	Gly	Arg	Lys	Asn	His	Ser	Asp	Lys	Gly	Pro	Lys	Pro
65					70					75					80
Val	Val	Phe	Leu	Gln	His	Gly	Leu	Leu	Ala	Asp	Ser	Ser	Asn	Trp	Val
				85					90					95	
Thr	Asn	Leu	Ala	Asn	Ser	Ser	Leu	Gly	Phe	Ile	Leu	Ala	Asp	Ala	Gly
			100					105					110		
Phe	Asp	Val	Trp	Met	Gly	Asn	Ser	Arg	Gly	Asn	Thr	Trp	Ser	Arg	Lys
	115						120					125			
His	Lys	Thr	Leu	Ser	Val	Ser	Gln	Asp	Glu	Phe	Trp	Ala	Phe	Ser	Tyr
	130					135					140				
Asp	Glu	Met	Ala	Lys	Tyr	Asp	Leu	Pro	Ala	Ser	Ile	Asn	Phe	Ile	Leu
145					150					155					160
Asn	Lys	Thr	Gly	Gln	Glu	Gln	Val	Tyr	Tyr	Val	Gly	His	Ser	Gln	Gly
				165					170					175	
Thr	Thr	Ile	Gly	Phe	Ile	Ala	Phe	Ser	Gln	Ile	Pro	Glu	Leu	Ala	Lys
		180						185					190		
Arg	Ile	Lys	Met	Phe	Phe	Ala	Leu	Gly	Pro	Val	Ala	Ser	Val	Ala	Phe
	195						200					205			
Cys	Thr	Ser	Pro	Met	Ala	Lys	Leu	Gly	Arg	Leu	Pro	Asp	His	Leu	Ile
210						215					220				
Lys	Asp	Leu	Phe	Gly	Asp	Lys	Glu	Phe	Leu	Pro	Gln	Ser	Ala	Phe	Leu
225					230					235					240
Lys	Trp	Leu	Gly	Thr	His	Val	Cys	Thr	His	Val	Ile	Leu	Lys	Glu	Leu
				245					250					255	
Cys	Gly	Asn	Leu	Cys	Phe	Leu	Leu	Cys	Gly	Phe	Asn	Glu	Arg	Asn	Leu
			260					265					270		
Asn	Met	Ser	Arg	Val	Asp	Val	Tyr	Thr	Thr	His	Ser	Pro	Ala	Gly	Thr
	275						280					285			
Ser	Val	Gln	Asn	Met	Leu	His	Trp	Ser	Gln	Ala	Val	Lys	Phe	Gln	Lys
	290					295					300				
Phe	Gln	Ala	Phe	Asp	Trp	Gly	Ser	Ser	Ala	Lys	Asn	Tyr	Phe	His	Tyr
305					310					315					320
Asn	Gln	Ser	Tyr	Pro	Pro	Thr	Tyr	Asn	Val	Lys	Asp	Met	Leu	Val	Pro
				325					330					335	
Thr	Ala	Val	Trp	Ser	Gly	Gly	His	Asp	Trp	Leu	Ala	Asp	Val	Tyr	Asp
			340					345					350		
Val	Asn	Ile	Leu	Leu	Thr	Gln	Ile	Thr	Asn	Leu	Val	Phe	His	Glu	Ser
	355					360						365			
Ile	Pro	Glu	Trp	Glu	His	Leu	Asp	Phe	Ile	Trp	Gly	Leu	Asp	Ala	Pro
	370					375					380				

Trp Arg Leu Tyr Asn Lys Ile Ile Asn Leu Met Arg Lys Tyr Gln
 385 390 395

<210> 412
 <211> 19
 <212> PRT
 <213> Homo sapiens

<400> 412
 Met Ala Pro Pro Ala Ala Arg Leu Ala Leu Leu Ser Ala Ala Ala Leu
 1 5 10 15
 Thr Leu Ala

<210> 413
 <211> 451
 <212> PRT
 <213> Homo sapiens

<400> 413
 Ala Arg Pro Ala Pro Gly Pro Arg Ser Gly Pro Glu Cys Phe Thr Ala
 1 5 10 15
 Asn Gly Ala Asp Tyr Arg Gly Thr Gln Ser Trp Thr Ala Leu Gln Gly
 20 25 30
 Gly Lys Pro Cys Leu Phe Trp Asn Glu Thr Phe Gln His Pro Tyr Asn
 35 40 45
 Thr Leu Lys Tyr Pro Asn Gly Glu Gly Gly Leu Gly Glu His Asn Tyr
 50 55 60
 Cys Arg Asn Pro Asp Gly Asp Val Ser Pro Trp Cys Tyr Val Ala Glu
 65 70 75 80
 His Glu Asp Gly Val Tyr Trp Lys Tyr Cys Glu Ile Pro Ala Cys Gln
 85 90 95
 Met Pro Gly Asn Leu Gly Cys Tyr Lys Asp His Gly Asn Pro Pro Pro
 100 105 110
 Leu Thr Gly Thr Ser Lys Thr Ser Asn Lys Leu Thr Ile Gln Thr Cys
 115 120 125
 Ile Ser Phe Cys Arg Ser Gln Arg Phe Lys Phe Ala Gly Met Glu Ser
 130 135 140
 Gly Tyr Ala Cys Phe Cys Gly Asn Asn Pro Asp Tyr Trp Lys His Gly
 145 150 155 160
 Glu Ala Ala Ser Thr Glu Cys Asn Ser Val Cys Phe Gly Asp His Thr
 165 170 175
 Gln Pro Cys Gly Gly Asp Gly Arg Ile Ile Leu Phe Asp Thr Leu Val
 180 185 190
 Gly Ala Cys Gly Gly Asn Tyr Ser Ala Met Ala Ala Val Val Tyr Ser
 195 200 205
 Pro Asp Phe Pro Asp Thr Tyr Ala Thr Gly Arg Val Cys Tyr Trp Thr
 210 215 220
 Ile Arg Val Pro Gly Ala Ser Arg Ile His Phe Asn Phe Thr Leu Phe
 225 230 235 240
 Asp Ile Arg Asp Ser Ala Asp Met Val Glu Leu Leu Asp Gly Tyr Thr
 245 250 255
 His Arg Val Leu Val Arg Leu Ser Gly Arg Ser Arg Pro Pro Leu Ser
 260 265 270
 Phe Asn Val Ser Leu Asp Phe Val Ile Leu Tyr Phe Phe Ser Asp Arg

<400> 415

```
gtcgacccac gcgtccgggg aattgcagca ggaaaatatg tgaagagttt ttaaaccac 60
aaattcttct tacttttagaa ttagttgtta cattggcagg aaaaaataaa tgcagatgtt 120
ggaccatgtt ggaaaccttg tcaagacagt ggattgtctc acacagaatg gaaatgtggc 180
ttctgattct ggtggcgat atgttccaga gaaatgtgaa ttcagtacat atgccaacta 240
aagctgtgga cccagaagca ttcataaata ttagtgaaat catccaacat caaggctatc 300
cctgtgagga atatgaagtc gcaactgaag atgggtatat cttttctgtt aacaggattc 360
ctcgaggcct agtgcaacct aagaagacag gttccaggcc tgtggtgtta ctgcagcatg 420
gcctagttag aggtgctagc aactggattt ccaacctgcc caacaatagc ctgggcttca 480
ttctggcaga tgctggtttt gacgtgtgga tggggaacag caggggaaac gcctggtctc 540
gaaaacacaa gacactctcc atagaccaag atgagttctg ggctttcagt tatgatgaga 600
tggctaggtt tgaccttcct gcagtataaa actttatttt gcagaaaacg ggccaggaaa 660
agatctatta tgtcggctat tcacagggca ccaccatggg ctttattgca ttttccacca 720
tgccagagct ggctcagaaa atcaaaatgt attttgcttt agcaccata gccactgtta 780
agcatgcaaa aagccccggg accaaatttt tgttgctgcc agatatgatg atcaagggat 840
tgtttggcaa aaaagaattt ctgtatcaga ccagatttct cagacaactt gttatttacc 900
tttgtggcca ggtgattctt gatcagattt gtagtaatat catgttactt ctgggtggat 960
tcaacaccaa caatatgaac atgagccgag caagtgtata tgctgcccac actcttgctg 1020
gaacatctgt gcaaaatatt ctacactgga gccaggcagt gaattctggt gaactccggg 1080
catttgactg ggggagtgag accaaaaatc tggaaaaatg caatcagcca actcctgtaa 1140
ggtacagagt cagagatatg acggtcccta cagcaatgtg gacaggaggt caggactggc 1200
tttcaaatcc agaagacgtg aaaatgctgc tctctgaggt gaccaacctc atctaccata 1260
agaatattcc tgaatgggct cacgtggatt tcatctgggg tttggatgct cctcaccgta 1320
tgtacaatga aatcatccat ctgatgcagc aggaggagac caacctttcc cagggacggg 1380
gtgaggccgt attgtgaagc atctgacact gacgatctta ggacaacctc ctgagggatg 1440
gggctaggac ccatgaaggc agaattacgg agagcagaga cctagtatac atttttcaga 1500
ttccctgcac ttggcactaa atccgacact tacatttaca ttttttttct gtaaatataa 1560
gtacttatta ggtaaataga ggttttgtat gctattatat attctaccat cttgaagggt 1620
aggttttacc tgatagccag aaaatatcta gacattctct atatcattca ggtaaattct 1680
tttaaaacac ctattgtttt ttctataagc catatttttg gagcactaaa gtaaaatggc 1740
aaattgggac agatattgag gtctggagtc tgtggattat tgttgacttt gacaaaataa 1800
gctagacatt ttcacctgtg tgccacagag acataacact acctcaggaa gctgagctgc 1860
tttaaggaca acaacaacaa aatcagtgtt acagtatgga tgaaatctat gttaagcatt 1920
ctcagaataa ggccaagttt tatagttgca tctcagggaa gaaaatttta taggatgttt 1980
atgagttctc caataaatgc attctgcatt acataaaaaa aaaaaaaaaa aaaagggcgg 2040
ccgc
```

<210> 416

<211> 1269

<212> DNA

<213> Homo sapiens

<400> 416

```
atgttggaac ccttgtcaag acagtggatt gtctcacaca gaatggaaat gtggcttctg 60
attctggtgg cgtatatgtt ccagagaaat gtgaattcag tacatatgcc aactaaagct 120
gtggacccag aagcattcat gaataattag gaaatcatcc aacatcaagg ctatccctgt 180
gaggaatatg aagtcgcaac tgaagatggg tatatccttt ctgttaacag gattcctcga 240
ggcctagtgc aacctaagaa gacaggttcc aggcctgtgg tgttactgca gcatggccta 300
gttgagggtg ctagcaactg gatttccaac ctgcccacaa atagcctggg cttcattctg 360
cgagatgctg gttttgacgt gtggatgggg aacagcaggg gaaacgcctg gtctcgaaaa 420
cacaagacac tctccataga ccaagatgag ttctgggctt tcagttatga tgagatggct 480
aggtttgacc ttctgcagt gataaacttt attttgacga aaacgggcca ggaaaagatc 540
tattatgtcg gctattcaca gggcaccacc atgggcttta ttgcattttc caccatgcca 600
gagctggctc agaaaatcaa aatgtatttt gctttagcac ccatagccac tgttaagcat 660
gcaaaaagcc ccgggaccaa atttttgttg ctgccagata tgatgatcaa gggattgttt 720
ggcaaaaaag aatttctgta tcagaccaga tttctcagac aacttggtat ttacctttgt 780
```



```

ggccagggtga ttcttgatca gatttgtagt aatatcatgt tacttctggg tggattcaac 840
accaacaata tgaacatgag ccgagcaagt gtatatgctg cccacactct tgctggaaca 900
tctgtgcaaa atattctaca ctggagccag gcagtgaatt ctggtgaact ccgggcattt 960
gactggggga gtgagaccaa aaatctggaa aaatgcaatc agccaactcc tgtaaggtag 1020
agagtcagag atatgacggg ccctacagca atgtggacag gaggtcagga ctggccttca 1080
aatccagaag acgtgaaaat gctgctctct gaggtgacca acctcatcta ccataagaat 1140
attcctgaat gggctcacgt ggatttcata tgggggtttgg atgctcctca ccgtatgtac 1200
aatgaaatca tccatctgat gcagcaggag gagaccaacc tttcccaggg acggtgtgag 1260
gccgtattg                                     1269

```

```

<210> 417
<211> 423
<212> PRT
<213> Homo sapiens

```

```

<400> 417
Met Leu Glu Thr Leu Ser Arg Gln Trp Ile Val Ser His Arg Met Glu
 1          5          10          15
Met Trp Leu Leu Ile Leu Val Ala Tyr Met Phe Gln Arg Asn Val Asn
 20          25          30
Ser Val His Met Pro Thr Lys Ala Val Asp Pro Glu Ala Phe Met Asn
 35          40          45
Ile Ser Glu Ile Ile Gln His Gln Gly Tyr Pro Cys Glu Glu Tyr Glu
 50          55          60
Val Ala Thr Glu Asp Gly Tyr Ile Leu Ser Val Asn Arg Ile Pro Arg
 65          70          75          80
Gly Leu Val Gln Pro Lys Lys Thr Gly Ser Arg Pro Val Val Leu Leu
 85          90          95
Gln His Gly Leu Val Gly Gly Ala Ser Asn Trp Ile Ser Asn Leu Pro
100          105          110
Asn Asn Ser Leu Gly Phe Ile Leu Ala Asp Ala Gly Phe Asp Val Trp
115          120          125
Met Gly Asn Ser Arg Gly Asn Ala Trp Ser Arg Lys His Lys Thr Leu
130          135          140
Ser Ile Asp Gln Asp Glu Phe Trp Ala Phe Ser Tyr Asp Glu Met Ala
145          150          155          160
Arg Phe Asp Leu Pro Ala Val Ile Asn Phe Ile Leu Gln Lys Thr Gly
165          170          175
Gln Glu Lys Ile Tyr Tyr Val Gly Tyr Ser Gln Gly Thr Thr Met Gly
180          185          190
Phe Ile Ala Phe Ser Thr Met Pro Glu Leu Ala Gln Lys Ile Lys Met
195          200          205
Tyr Phe Ala Leu Ala Pro Ile Ala Thr Val Lys His Ala Lys Ser Pro
210          215          220
Gly Thr Lys Phe Leu Leu Leu Pro Asp Met Met Ile Lys Gly Leu Phe
225          230          235          240
Gly Lys Lys Glu Phe Leu Tyr Gln Thr Arg Phe Leu Arg Gln Leu Val
245          250          255
Ile Tyr Leu Cys Gly Gln Val Ile Leu Asp Gln Ile Cys Ser Asn Ile
260          265          270
Met Leu Leu Leu Gly Gly Phe Asn Thr Asn Asn Met Asn Met Ser Arg
275          280          285
Ala Ser Val Tyr Ala Ala His Thr Leu Ala Gly Thr Ser Val Gln Asn
290          295          300
Ile Leu His Trp Ser Gln Ala Val Asn Ser Gly Glu Leu Arg Ala Phe
305          310          315          320
Asp Trp Gly Ser Glu Thr Lys Asn Leu Glu Lys Cys Asn Gln Pro Thr

```


Phe	Ala	Leu	Ala	Pro	Ile	Ala	Thr	Val	Lys	His	Ala	Lys	Ser	Pro	Gly
			180					185					190		
Thr	Lys	Phe	Leu	Leu	Leu	Pro	Asp	Met	Met	Ile	Lys	Gly	Leu	Phe	Gly
		195					200					205			
Lys	Lys	Glu	Phe	Leu	Tyr	Gln	Thr	Arg	Phe	Leu	Arg	Gln	Leu	Val	Ile
	210					215					220				
Tyr	Leu	Cys	Gly	Gln	Val	Ile	Leu	Asp	Gln	Ile	Cys	Ser	Asn	Ile	Met
225					230					235					240
Leu	Leu	Leu	Gly	Gly	Phe	Asn	Thr	Asn	Asn	Met	Asn	Met	Ser	Arg	Ala
			245						250					255	
Ser	Val	Tyr	Ala	Ala	His	Thr	Leu	Ala	Gly	Thr	Ser	Val	Gln	Asn	Ile
			260					265					270		
Leu	His	Trp	Ser	Gln	Ala	Val	Asn	Ser	Gly	Glu	Leu	Arg	Ala	Phe	Asp
		275					280					285			
Trp	Gly	Ser	Glu	Thr	Lys	Asn	Leu	Glu	Lys	Cys	Asn	Gln	Pro	Thr	Pro
	290					295					300				
Val	Arg	Tyr	Arg	Val	Arg	Asp	Met	Thr	Val	Pro	Thr	Ala	Met	Trp	Thr
305					310					315					320
Gly	Gly	Gln	Asp	Trp	Leu	Ser	Asn	Pro	Glu	Asp	Val	Lys	Met	Leu	Leu
			325						330					335	
Ser	Glu	Val	Thr	Asn	Leu	Ile	Tyr	His	Lys	Asn	Ile	Pro	Glu	Trp	Ala
			340					345					350		
His	Val	Asp	Phe	Ile	Trp	Gly	Leu	Asp	Ala	Pro	His	Arg	Met	Tyr	Asn
		355					360					365			
Glu	Ile	Ile	His	Leu	Met	Gln	Gln	Glu	Glu	Thr	Asn	Leu	Ser	Gln	Gly
	370					375					380				
Arg	Cys	Glu	Ala	Val	Leu										
385					390										

<210> 420
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 420

Val	His	Met	Pro	Thr	Lys	Ala	Val	Asp	Pro	Glu	Ala	Phe	Met	Asn	Ile
1				5				10						15	
Ser	Glu	Ile	Ile	Gln	His	Gln	Gly	Tyr	Pro	Cys	Glu	Glu	Tyr	Glu	Val
			20					25					30		
Ala	Thr	Glu	Asp	Gly	Tyr	Ile	Leu	Ser	Val	Asn	Arg	Ile	Pro	Arg	Gly
		35				40						45			
Leu	Val	Gln	Pro	Lys	Lys	Thr	Gly	Ser	Arg	Pro	Val	Val	Leu	Leu	Gln
	50					55					60				
His	Gly	Leu	Val	Gly	Gly	Ala	Ser	Asn	Trp	Ile	Ser	Asn	Leu	Pro	Asn
65				70						75					80
Asn	Ser	Leu	Gly	Phe	Ile	Leu	Ala	Asp	Ala	Gly	Phe	Asp	Val	Trp	Met
			85					90						95	
Gly	Asn	Ser	Arg	Gly	Asn	Ala	Trp	Ser	Arg	Lys	His	Lys	Thr	Leu	Ser
			100					105					110		
Ile	Asp	Gln	Asp	Glu	Phe	Trp	Ala	Phe	Ser	Tyr	Asp	Glu	Met	Ala	Arg
	115					120						125			
Phe	Asp	Leu	Pro	Ala	Val	Ile	Asn	Phe	Ile	Leu	Gln	Lys	Thr	Gly	Gln
	130					135					140				
Glu	Lys	Ile	Tyr	Tyr	Val	Gly	Tyr	Ser	Gln	Gly	Thr	Thr	Met	Gly	Phe
145					150					155					160
Ile	Ala	Phe	Ser	Thr	Met	Pro	Glu	Leu	Ala	Gln	Lys	Ile	Lys	Met	Tyr

				165					170				175			
Phe	Ala	Leu	Ala	Pro	Ile	Ala	Thr	Val	Lys	His	Ala	Lys	Ser	Pro	Gly	
			180					185					190			
Thr	Lys	Phe	Leu	Leu	Leu	Pro	Asp	Met	Met	Ile	Lys	Gly	Leu	Phe	Gly	
		195					200					205				
Lys	Lys	Glu	Phe	Leu	Tyr	Gln	Thr	Arg	Phe	Leu	Arg	Gln				
	210					215					220					

<210> 421
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 421																
Leu	Val	Ile	Tyr	Leu	Cys	Gly	Gln	Val	Ile	Leu	Asp	Gln	Ile	Cys	Ser	
1				5				10						15		
Asn	Ile	Met	Leu	Leu	Leu	Gly	Gly	Phe								
			20				25									

<210> 422
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 422																
Asn	Thr	Asn	Asn	Met	Asn	Met	Ser	Arg	Ala	Ser	Val	Tyr	Ala	Ala	His	
1				5				10						15		
Thr	Leu	Ala	Gly	Thr	Ser	Val	Gln	Asn	Ile	Leu	His	Trp	Ser	Gln	Ala	
		20					25						30			
Val	Asn	Ser	Gly	Glu	Leu	Arg	Ala	Phe	Asp	Trp	Gly	Ser	Glu	Thr	Lys	
		35					40					45				
Asn	Leu	Glu	Lys	Cys	Asn	Gln	Pro	Thr	Pro	Val	Arg	Tyr	Arg	Val	Arg	
	50				55					60						
Asp	Met	Thr	Val	Pro	Thr	Ala	Met	Trp	Thr	Gly	Gly	Gln	Asp	Trp	Leu	
65				70				75						80		
Ser	Asn	Pro	Glu	Asp	Val	Lys	Met	Leu	Leu	Ser	Glu	Val	Thr	Asn	Leu	
			85					90						95		
Ile	Tyr	His	Lys	Asn	Ile	Pro	Glu	Trp	Ala	His	Val	Asp	Phe	Ile	Trp	
		100					105						110			
Gly	Leu	Asp	Ala	Pro	His	Arg	Met	Tyr	Asn	Glu	Ile	Ile	His	Leu	Met	
		115				120						125				
Gln	Gln	Glu	Glu	Thr	Asn	Leu	Ser	Gln	Gly	Arg	Cys	Glu	Ala	Val	Leu	
	130					135					140					

<210> 423
 <211> 2133
 <212> DNA
 <213> Homo sapiens

<400> 423																
gtcgacccac	gcgtccacgg	cgaggggctcc	cgggggcgcag	cattgcccc	cctgcaccac	60										
ctcaccaaga	tggctacttt	gggacacaca	ttccccttct	atgctggccc	caagccaacc	120										
ttcccgatgg	acaccacttt	ggccagcatc	atcatgatct	ttctgactgc	actggccacg	180										
ttcatcgtca	tcctgcctgg	cattcgggga	aagacgaggc	tggtctggct	gcttcgggtg	240										

gtgaccagct	tattcatcgg	ggctgcaatc	ctggctgtga	atttcagttc	tgagtgggtct	300
gtgggccagg	tcagcaccaa	cacatcatal	aaggccttca	gttctgagtg	gatcagcgct	360
gatattgggc	tgcaggtcgg	gctgggtgga	gtcaacatca	cactcacagg	gacccccgtg	420
cagcagctga	atgagaccat	caattacaac	gaggagtcca	cctggcgcct	gggtgagaac	480
tatgctgagg	agtgtgcaaa	ggctctggag	aaggggctgc	cagaccctgt	gttgtagcta	540
gctgagaagt	tcactccaag	aagcccatgt	ggcctatacc	gccagtaccg	cctggcgagg	600
cactacacct	cagccatgct	atgggtggca	ttcctctgct	ggctgctggc	caatgtgatg	660
ctctccatgc	ctgtgctggt	atatggtggc	tacatgctat	tggccacggg	catcttccag	720
ctgttggtct	tgctcttctt	ctccatggcc	acatcactca	cctcaccctg	tcccctgcac	780
ctgggcgctt	ctgtgctgca	tactcaccat	gggcctgcct	tctggatcac	attgaccaca	840
ggactgctgt	gtgtgctgct	gggcctggct	atggcggtgg	cccacaggat	gcagcctcac	900
aggctgaagg	ctttcttcaa	ccagagtgtg	gatgaagacc	ccatgctgga	gtggagtctt	960
gaggaagggt	gactcctgag	cccccgctac	cggtccatgg	ctgacagtcc	caagtcccag	1020
gacattcccc	tgtcagaggc	ttcctccacc	aaggcatact	gtaaggaggc	acaccccaaa	1080
gatectgatt	gtgctttata	acattcctcc	ccgtggaggc	cacctggact	tccagtctgg	1140
ctccaaacct	cattggcgcc	ccataaaacc	agcagaactg	ccctcagggt	ggctgttacc	1200
agacacccag	caccaatcta	cagacggagt	agaaaaagga	ggctctatat	actgatgtta	1260
aaaaacaaaa	caaaacaaaa	agccctaagg	gactgaagag	atgctggggc	tgtccataaa	1320
gcctgttgcc	atgataaggc	caagcagggg	ctagcttatc	tgcacagcaa	cccagccttt	1380
ccgtgctgcc	ttgcctcttc	aagatgctat	tactgaaac	ctaacttcac	cccataaca	1440
ccagcagggg	gggggttaca	tatgattctc	ctatggtttc	ctctcatccc	tcggcacctc	1500
ttgttttctt	tttctctggg	ttccttttgt	tttctcttta	cttctccagc	ttgtgtggcc	1560
tttttggtaca	atgaaagaca	gcactggaaa	ggaggggaaa	ccaaacttct	catcctaggt	1620
ctaactataa	ccaactatgc	cacattctct	ttgagcttca	gttcccaaat	ttgctacata	1680
agattgcaag	acttgccaag	aatcttgagg	tttatctttc	tatgccttgc	tgacacctac	1740
cttggccctc	aaacaccacc	tcacaagaag	ccaggtggga	agttagggaa	tcaactccaa	1800
aacgctatct	cttcccaccc	cactcagctg	ggctagctga	gtggcatcca	ggacggggga	1860
gtgggtgacc	tgcctcatca	ctgccaccta	acgtccccct	gggggtgggtc	agaaagatgc	1920
tagctctggt	agggtccctc	cggcctcact	agagggcgcc	cctattactc	tggagtcgac	1980
gcagagaatc	aggtttcaca	gcactgcgga	gagtgtacta	ggctgtctcc	agcccagcga	2040
agctcatgag	gacgtgcgac	cccggcgccg	agaagccatg	aaaattaatg	ggaaaaacag	2100
tttttaaaaa	aaaaaaaaaa	aaagggcgcc	cgc			2133

<210> 424
 <211> 1029
 <212> DNA
 <213> Homo sapiens

<400> 424						
atggctactt	tgggacacac	attccccttc	tatgctggcc	ccaagccaac	cttcccgatg	60
gacaccactt	tggccagcat	catcatgata	tttctgactg	cactggccac	gttcatcgtc	120
atcctgcctg	gcattcgggg	aaagacgagg	ctgttctggc	tgttctgggt	ggtgaccagc	180
ttattcatcg	gggctgcaat	cctggctgtg	aatttcagtt	ctgagtggtc	tgtgggccag	240
gtcagcacca	acacatcata	caaggccttc	agttctgagt	ggatcagcgc	tgatattggg	300
ctgcaggtcg	ggctgggtgg	agtcaacatc	acactcacag	ggacccccgt	gcagcagctg	360
aatgagacca	tcaattacaa	cgaggagttc	acctggcgcc	tgggtgagaa	ctatgctgag	420
gagtgtgcaa	aggctctgga	gaaggggctg	ccagaccctg	tggtgtacct	agctgagaag	480
ttcactccaa	gaagcccatg	tggcctatac	cgccagtacc	gcctggcggg	acactacacc	540
tcagccatgc	tatgggtggc	attcctctgc	tggtgctggt	ccaatgtgat	gctctccatg	600
cctgtgctgg	tatatgggtg	ctacatgcta	ttggccacgg	gcattctcca	gctgttggct	660
ctgctcttct	tctccatggc	cacatcactc	acctcaccct	gtccccctga	cctgggcgct	720
tctgtgctgc	atactcacca	tgggcctgcc	ttctggatca	cattgaccac	aggactgctg	780
tgtgtgctgc	tgggcctggc	tatggcggtg	gccacagga	tgcagcctca	caggctgaag	840
gctttcttca	accagagtg	ggatgaagac	cccatgctgg	agtggagtcc	tgaggaagg	900
ggactcctga	gcccccgcta	ccggtccatg	gctgacagtc	ccaagtccca	ggacattccc	960
ctgtcagagg	cttctctccac	caaggcatac	tgtaaggagg	cacaccccaa	agatcctgat	1020
tgtgcttta						1029

<210> 425
 <211> 343
 <212> PRT
 <213> Homo sapiens

<400> 425

Met	Ala	Thr	Leu	Gly	His	Thr	Phe	Pro	Phe	Tyr	Ala	Gly	Pro	Lys	Pro
1				5					10					15	
Thr	Phe	Pro	Met	Asp	Thr	Thr	Leu	Ala	Ser	Ile	Ile	Met	Ile	Phe	Leu
			20					25					30		
Thr	Ala	Leu	Ala	Thr	Phe	Ile	Val	Ile	Leu	Pro	Gly	Ile	Arg	Gly	Lys
		35					40					45			
Thr	Arg	Leu	Phe	Trp	Leu	Leu	Arg	Val	Val	Thr	Ser	Leu	Phe	Ile	Gly
	50					55					60				
Ala	Ala	Ile	Leu	Ala	Val	Asn	Phe	Ser	Ser	Glu	Trp	Ser	Val	Gly	Gln
65					70					75					80
Val	Ser	Thr	Asn	Thr	Ser	Tyr	Lys	Ala	Phe	Ser	Ser	Glu	Trp	Ile	Ser
			85						90					95	
Ala	Asp	Ile	Gly	Leu	Gln	Val	Gly	Leu	Gly	Gly	Val	Asn	Ile	Thr	Leu
			100					105					110		
Thr	Gly	Thr	Pro	Val	Gln	Gln	Leu	Asn	Glu	Thr	Ile	Asn	Tyr	Asn	Glu
		115					120					125			
Glu	Phe	Thr	Trp	Arg	Leu	Gly	Glu	Asn	Tyr	Ala	Glu	Glu	Cys	Ala	Lys
	130					135					140				
Ala	Leu	Glu	Lys	Gly	Leu	Pro	Asp	Pro	Val	Leu	Tyr	Leu	Ala	Glu	Lys
145					150					155					160
Phe	Thr	Pro	Arg	Ser	Pro	Cys	Gly	Leu	Tyr	Arg	Gln	Tyr	Arg	Leu	Ala
			165						170					175	
Gly	His	Tyr	Thr	Ser	Ala	Met	Leu	Trp	Val	Ala	Phe	Leu	Cys	Trp	Leu
		180						185					190		
Leu	Ala	Asn	Val	Met	Leu	Ser	Met	Pro	Val	Leu	Val	Tyr	Gly	Gly	Tyr
		195					200					205			
Met	Leu	Leu	Ala	Thr	Gly	Ile	Phe	Gln	Leu	Leu	Ala	Leu	Leu	Phe	Phe
	210					215					220				
Ser	Met	Ala	Thr	Ser	Leu	Thr	Ser	Pro	Cys	Pro	Leu	His	Leu	Gly	Ala
225					230					235					240
Ser	Val	Leu	His	Thr	His	His	Gly	Pro	Ala	Phe	Trp	Ile	Thr	Leu	Thr
			245						250					255	
Thr	Gly	Leu	Leu	Cys	Val	Leu	Leu	Gly	Leu	Ala	Met	Ala	Val	Ala	His
		260						265					270		
Arg	Met	Gln	Pro	His	Arg	Leu	Lys	Ala	Phe	Phe	Asn	Gln	Ser	Val	Asp
		275					280					285			
Glu	Asp	Pro	Met	Leu	Glu	Trp	Ser	Pro	Glu	Glu	Gly	Gly	Leu	Leu	Ser
	290					295					300				
Pro	Arg	Tyr	Arg	Ser	Met	Ala	Asp	Ser	Pro	Lys	Ser	Gln	Asp	Ile	Pro
305					310					315					320
Leu	Ser	Glu	Ala	Ser	Ser	Thr	Lys	Ala	Tyr	Cys	Lys	Glu	Ala	His	Pro
			325						330					335	
Lys	Asp	Pro	Asp	Cys	Ala	Leu									
			340												

<210> 426
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 426
 Met Ala Thr Leu Gly His Thr Phe Pro Phe Tyr Ala Gly Pro Lys Pro
 1 5 10 15
 Thr Phe Pro Met Asp Thr Thr
 20

<210> 427
 <211> 112
 <212> PRT
 <213> Homo sapiens

<400> 427
 Asn Phe Ser Ser Glu Trp Ser Val Gly Gln Val Ser Thr Asn Thr Ser
 1 5 10 15
 Tyr Lys Ala Phe Ser Ser Glu Trp Ile Ser Ala Asp Ile Gly Leu Gln
 20 25 30
 Val Gly Leu Gly Gly Val Asn Ile Thr Leu Thr Gly Thr Pro Val Gln
 35 40 45
 Gln Leu Asn Glu Thr Ile Asn Tyr Asn Glu Glu Phe Thr Trp Arg Leu
 50 55 60
 Gly Glu Asn Tyr Ala Glu Glu Cys Ala Lys Ala Leu Glu Lys Gly Leu
 65 70 75 80
 Pro Asp Pro Val Leu Tyr Leu Ala Glu Lys Phe Thr Pro Arg Ser Pro
 85 90 95
 Cys Gly Leu Tyr Arg Gln Tyr Arg Leu Ala Gly His Tyr Thr Ser Ala
 100 105 110

<210> 428
 <211> 22
 <212> PRT
 <213> Homo sapiens

<400> 428
 Thr Ser Leu Thr Ser Pro Cys Pro Leu His Leu Gly Ala Ser Val Leu
 1 5 10 15
 His Thr His His Gly Pro
 20

<210> 429
 <211> 19
 <212> PRT
 <213> Homo sapiens

<400> 429
 Leu Ala Ser Ile Ile Met Ile Phe Leu Thr Ala Leu Ala Thr Phe Ile
 1 5 10 15
 Val Ile Leu

<210> 430
 <211> 20
 <212> PRT

<213> Homo sapiens

<400> 430

Leu Phe Trp Leu Leu Arg Val Val Thr Ser Leu Phe Ile Gly Ala Ala
1 5 10 15
Ile Leu Ala Val
20

<210> 431

<211> 22

<212> PRT

<213> Homo sapiens

<400> 431

Met Leu Trp Val Ala Phe Leu Cys Trp Leu Leu Ala Asn Val Met Leu
1 5 10 15
Ser Met Pro Val Leu Val
20

<210> 432

<211> 17

<212> PRT

<213> Homo sapiens

<400> 432

Leu Ala Thr Gly Ile Phe Gln Leu Leu Ala Leu Leu Phe Phe Ser Met
1 5 10 15
Ala

<210> 433

<211> 22

<212> PRT

<213> Homo sapiens

<400> 433

Ala Phe Trp Ile Thr Leu Thr Thr Gly Leu Leu Cys Val Leu Leu Gly
1 5 10 15
Leu Ala Met Ala Val Ala
20

<210> 434

<211> 8

<212> PRT

<213> Homo sapiens

<400> 434

Pro Gly Ile Arg Gly Lys Thr Arg
1 5

<210> 435

<211> 6

<212> PRT
 <213> Homo sapiens

<400> 435
 Tyr Gly Gly Tyr Met Leu
 1 5

<210> 436
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 436
 His Arg Met Gln Pro His Arg Leu Lys Ala Phe Phe Asn Gln Ser Val
 1 5 10 15
 Asp Glu Asp Pro Met Leu Glu Trp Ser Pro Glu Glu Gly Gly Leu Leu
 20 25 30
 Ser Pro Arg Tyr Arg Ser Met Ala Asp Ser Pro Lys Ser Gln Asp Ile
 35 40 45
 Pro Leu Ser Glu Ala Ser Ser Thr Lys Ala Tyr Cys Lys Glu Ala His
 50 55 60
 Pro Lys Asp Pro Asp Cys Ala Leu
 65 70

<210> 437
 <211> 4928
 <212> DNA
 <213> Mus sp.

<400> 437
 gtcgacccac gcgtccgccc ggctcccggg gctgccccct ctgccccggg ccgcgccccg 60
 ggggtcccga ctgacggccc atggcgccgc ccgcccgcgc tctcgcgctg ctctccgccc 120
 ctgcgctcac tctggcggcc cggcccgcgc ccggtccccg ctccggcccc gagtgcttca 180
 cagccaacgg tgcagattac aggggaacac agagctggac agcgctgcaa ggtgggaagc 240
 catgtctgtt ctggaacgag actttccagc atccgtacaa cacgctgaag taccccaacg 300
 gggaaggagg actgggcgag cacaattatt gcagaaatcc agatggagac gtgagccctt 360
 ggtgctacgt ggccgagcat gaggacggag tctactggaa gtactgtgaa attcctgcct 420
 gccagatgcc tggaaacctt ggctgtaca aggatcatgg aaaccacct cctctcacgg 480
 gcaccagtaa aacctctaac aagctcacca taaaacctg tatcagcttc tgcggagtc 540
 agagattcaa gtttgtctgg atggagtcag gctatgcctg cttctgtggg aacaatcctg 600
 actactggaa gcacggggag gcggccagca ccgagtgcaa tagtgtctgc ttcggggacc 660
 acacgcagcc ctgcggtggg gacggcagga ttatcctctt tgacactctc gtgggcgcct 720
 gcggtgggaa ctactcagcc atggcagccg tgggtgtact ccctgacttc cctgacacct 780
 acgccactgg cagagtctgc tactggacca tccgggttcc aggagcctct cgcattccatt 840
 tcaacttcac cctgtttgat atcagggact ctgcagacat ggtggagctg ctggacggct 900
 acaccacccg cgtcctggtc cggctcagtg ggaggagccg cccgcctctg tctttcaatg 960
 tctctctgga tttgtcatt ttgtatttct tctctgatcg catcaatcag gccagggat 1020
 ttgctgtgtt gtaccaagcc accaaggagg aaccgccaca ggagagacct gctgtcaacc 1080
 agaccctggc agaggtgatc accgagcaag ccaacctcag tgtcagcgct gccactcct 1140
 ccaaagtctt ctatgtcatc acccccagcc ccagccacct tccgcagact gccaggtag 1200
 ccattcctgg gcaccgtcag ttggggccaa cagccacaga gtggaaggat ggactgtgta 1260
 cggcctggcg accctcctca tctcacagt cacagcagtt gtcgcaaaga ttcttctgca 1320
 tgtcacattt aaatctcatc gagtccctgc atcaggagac cttagggact gtcgtcagcc 1380
 tggggcttct ggagatatct ggaccatttt ctatgaacct tccactacaa tctccatctt 1440
 taagaagaag ctcaagggtc agagtcaaca agatgaccgc aatccccctg tgagtgactg 1500

aagcccacgc	ctgcatgaga	ggctccgctc	caagctcgag	tttgctcccc	tgagttctcc	1560
tctgatgagt	tccctgcctt	cccattcacc	accatctctt	ttggggagcac	cctgcttttag	1620
aggcagccca	gcctgggatc	ctccatcaca	tgtaccagcc	tggtgctct	gctggggatg	1680
gtaagacagg	cccaggctga	caggacacag	ctggacctga	ctccagaaga	ctcttgggtg	1740
gtggggagg	atagtgtagg	atgagttttc	ttgcttcttc	tctgttttgt	ccacatacag	1800
atcggtttcc	cctgtcttta	cagtttgcaa	tagagccaga	ctgaaagaac	tgtcaggttt	1860
tctaggctgg	cctggttccc	cactaagagt	ggcattggcg	ccctagaggc	ccagaggccc	1920
agtgtaggct	tggagctttc	tctgctgcca	actaccatgt	gtcatctagt	ccgaggggac	1980
tgagagcagg	gccacaccag	atgtcatctt	tctagagggt	tcttttttagt	acccactgac	2040
caatggggca	agcctgagga	ttggtccatc	tgtttgtcca	tggaacagac	acagtgaact	2100
tcctggatac	tagacttaac	tagcctagcc	ctcaagtagt	tgccaatcct	gtggaatcag	2160
aattcagcct	gtcttcctgt	cctcagccca	agcctgtagc	ctagagctgg	ggctgtagcc	2220
tagagctggg	gctgtagcct	agagctgggg	ctgtagcaca	gagctggggc	tgtagcctag	2280
agctggggct	gtagcacaga	gctggggctg	tagcctagag	ctggggctgt	agcacagagc	2340
tggggctgta	gcacagagct	ggggctgtag	cctagagctg	gggctgtagc	acagagctgg	2400
ggctgtaact	cagcgatcaa	gagcttgctt	tgtatacatc	ggaccctagg	ttctatccca	2460
gcactatcag	aagggtgggag	agaaaaagac	tgcaccatag	catgcgggca	gcactctgtg	2520
ttcctacgtg	aggtgtcatc	attttaaaag	cagatcaaaa	ctaccgag	ttttgtcctt	2580
tgcccccttat	catgggagca	gagtaggagt	aagggtctctg	gtcttgctca	ttgtcccca	2640
gacagggagg	caggaaaagg	tcaggcttgg	gaactggaga	tcctcccagg	aaaagctgca	2700
agattgagag	acccagctgc	agttgggaga	ggaagggcca	tccccgactg	agaagtcctg	2760
cagctctggaa	gtggcctttg	tcagcagcag	ctgtgcctcg	aaggtagacc	ttggctcact	2820
tcctgccagc	ccttgagcct	ctgctctcct	gggtaccctc	ctggaacacc	atgtcaacct	2880
tcctccagtc	tctcagtcac	tgccattgag	gcctctcctc	tagctgctgc	tcccaggac	2940
tgtctggggc	catctgggga	tcagggagag	gcagcaggag	tactgacgag	gcagtgcact	3000
gagctgatga	gtcaaccaga	ggacaccaga	gtctacagtg	ggctggctgc	tggctcagct	3060
cctatgggag	gcctacaggg	gtactaagct	agggggctcat	catctcattt	gatctgggaa	3120
aggctacagg	ctcctggatg	tgaagacagg	cccactacat	aagaagacca	ctggaaatag	3180
actgacagga	gcaggttcca	ctctaggctg	tccatagcgt	ttgcaggact	cccctgagac	3240
caagtgttga	gtcacagagt	gccatgtgcg	tagtgcataa	aggatatggg	ttcttaacca	3300
gggaaggctc	atagcaggcc	aggacatttt	ttcagctcag	agcactggcc	ccaggcttcc	3360
tctaagccac	cactcacctg	tctcttccta	tctcggacac	aggaagcaag	ccccagtgtg	3420
gtggcagctg	cggctcagca	ttggtgtccc	caggaagggc	ggtggatgtg	cccacgctcc	3480
ttttgctgtg	ggcctggcac	agcccaacac	tgcagggccc	accttctctc	ttggggggta	3540
gggacacata	aggaaaaacta	acccacctcc	aacaacagca	gaggacagtg	ggaaggaagg	3600
gctgtaaatc	acccaggcca	gacctccaga	aatgacaggc	acagtctgtt	agaacctgta	3660
ggcagccagt	cacagagggc	ctttgtgctg	gtaacacctt	gcctggagca	taggggtaag	3720
ccgagggaga	agagcagccc	tcagagacat	cagctaaaaa	cataggtgcc	ctatgtccct	3780
cccttctctgt	cacactgctt	acaaagcaga	gacagagtag	gaaagaggtc	ttcatcctct	3840
ccacatcag	caaggatagg	gctgcggctg	cctaaagtga	gcaaggagaa	cagagctctg	3900
gacttctcta	aatgtgggct	ctggcttcag	actcctcagc	caaaagctct	tgaagatcaa	3960
agctctggcg	ggtacagctg	tcctggcctg	tgggccagcc	catgggatgt	gcctgggcca	4020
ggtgccaccc	cacggctcac	tgtcatccca	ggagggaccc	cacctgatgc	tcctcatcat	4080
ccgctggcct	gacactatca	gagctcgcgc	cggctgttgc	cagggacaga	ctgactacac	4140
ttgaccttca	agagcactta	gaagtggatg	gcctccagac	tctgtcagcc	tctgcagggg	4200
ccacacaagt	ctcccagagcc	aagtccacaa	gcctccatgg	ttccctggct	cctctcctgt	4260
ggagtgtcct	gtttgatgtc	tgaggtctgc	tttgggtacc	gccctgggaa	ctgctaacct	4320
ccgattgggtc	cctttgtgtc	tctgtttact	gtcctcttct	acctccaggt	cacttagctc	4380
tggctgctct	tggtgggagt	gggggggtgg	gatgctggct	gcacccccc	cctggctctgc	4440
caacagaacc	tgggggcctc	acacgggctc	ctgtcttgcc	aagctggagc	tgagcacact	4500
ggcccaggct	gagtggggca	gagcaaacaa	gtggaagggg	atctctctcc	ttagagggag	4560
gtggccgaag	gtgtagatcc	agcgagggag	ctgccatccc	cgccaccttc	atagcagcaa	4620
gaccttccca	tttccaatct	caccctccag	cagggatatg	actttggaca	acaaggcttt	4680
atgtgtaaat	atgtctcttaa	tatgcaactt	tgagaataag	atagaaacat	catgtatttt	4740
aaaatataaa	atgaagtgtg	acacactgta	tacaatttaa	tatatatttt	taggattttg	4800
ttattttaaga	aatggaatg	tgatgggtact	taacttttac	aaaagagaga	aatgtttatt	4860
tttactgttt	gaagaaaata	aatattctca	ttgttgtaga	aaaaaaaaaa	aaaaaaaaag	4920

gcggccgc

4928

<210> 438

<211> 1410

<212> DNA

<213> Mus sp.

<400> 438

```
atggcgccgc cgcgcgcccc tctcgcgctg ctctccgcgc ctgcgctcac tctggcggcc 60
cggcccgccgc cgggtccccg ctccggcccc gagtgcttca cagccaacgg tgcagattac 120
aggggaacac agagctggac agcgtgcaa ggtgggaagc catgtctgtt ctggaacgag 180
actttccagc atccgtacaa cacgtgaag taccccaacg gggaaggagg actgggcgag 240
cacaattatt gcagaaatcc agatggagac gtgagccctt ggtgctacgt ggccgagcat 300
gaggacggag tctactggaa gtactgtgaa attcctgcct gccagatgcc tggaaacctt 360
ggctgctaca aggatcatgg aaaccacact cctctcacgg gcaccagtaa aacctctaac 420
aagctcacca tacaacctg tatcagcttc tgcggagtc agagattcaa gtttgcgtgg 480
atggagtcag gctatgcctg cttctgtggg aacaatcctg actactggaa gcacggggag 540
gcggccagca ccgagtcaa tagtgtctgc ttccggggacc acacgcagcc ctgcggtggg 600
gacggcagga ttatcctctt tgacactctc gtgggcgcct gcggtgggaa ctactcagcc 660
atggcagccg tgggtgtactc ccctgacttc cctgacacct acgccactgg cagagtctgc 720
tactggacca tccgggttcc aggagcctct cgcattccatt tcaacttcac cctgtttgat 780
atcagggact ctgcagacat ggtggagctg ctggacggct acaccaccg cgtcctggtc 840
cggctcagtg ggaggagccg cccgcctctg tctttcaatg tctctctgga ttttgtcatt 900
ttgtatttct tctctgatcg catcaatcag gcccagggat ttgctgtgtt gtaccaagcc 960
accaaggagg aaccgccaca ggagagacct gctgtcaacc agaccctggc agaggtgatc 1020
accgagcaag ccaacctcag tgtcagcgtt gccactcct ccaaagtcct ctatgtcatc 1080
acccccagcc ccagccaccc tccgcagact gcccaggtag ccattcctgg gcaccgtcag 1140
ttggggccaa cagccacaga gtggaaggat ggactgtgta cggcctggcg accctcctca 1200
tcctcacagt cacagcagtt gtcgcaaaga ttctttctgca tgtcacattt aaatctcatc 1260
gagtccttgc atcaggagac cttagggact gtcgtcagcc tggggcttct ggagatatct 1320
ggaccatttt ctatgaacct tccactacaa tctccatctt taagaagaag ctcaagggtc 1380
agagtcaaca agatgaccgc aatcccctcg 1410
```

<210> 439

<211> 470

<212> PRT

<213> Mus sp.

<400> 439

```
Met Ala Pro Pro Ala Ala Arg Leu Ala Leu Leu Ser Ala Ala Ala Leu
1          5          10          15
Thr Leu Ala Ala Arg Pro Ala Pro Gly Pro Arg Ser Gly Pro Glu Cys
20          25          30
Phe Thr Ala Asn Gly Ala Asp Tyr Arg Gly Thr Gln Ser Trp Thr Ala
35          40          45
Leu Gln Gly Gly Lys Pro Cys Leu Phe Trp Asn Glu Thr Phe Gln His
50          55          60
Pro Tyr Asn Thr Leu Lys Tyr Pro Asn Gly Glu Gly Gly Leu Gly Glu
65          70          75          80
His Asn Tyr Cys Arg Asn Pro Asp Gly Asp Val Ser Pro Trp Cys Tyr
85          90          95
Val Ala Glu His Glu Asp Gly Val Tyr Trp Lys Tyr Cys Glu Ile Pro
100         105         110
Ala Cys Gln Met Pro Gly Asn Leu Gly Cys Tyr Lys Asp His Gly Asn
115         120         125
Pro Pro Pro Leu Thr Gly Thr Ser Lys Thr Ser Asn Lys Leu Thr Ile
130         135         140
```

Gln	Thr	Cys	Ile	Ser	Phe	Cys	Arg	Ser	Gln	Arg	Phe	Lys	Phe	Ala	Gly
145					150					155					160
Met	Glu	Ser	Gly	Tyr	Ala	Cys	Phe	Cys	Gly	Asn	Asn	Pro	Asp	Tyr	Trp
			165						170					175	
Lys	His	Gly	Glu	Ala	Ala	Ser	Thr	Glu	Cys	Asn	Ser	Val	Cys	Phe	Gly
			180					185					190		
Asp	His	Thr	Gln	Pro	Cys	Gly	Gly	Asp	Gly	Arg	Ile	Ile	Leu	Phe	Asp
		195					200					205			
Thr	Leu	Val	Gly	Ala	Cys	Gly	Gly	Asn	Tyr	Ser	Ala	Met	Ala	Ala	Val
	210					215					220				
Val	Tyr	Ser	Pro	Asp	Phe	Pro	Asp	Thr	Tyr	Ala	Thr	Gly	Arg	Val	Cys
225					230					235					240
Tyr	Trp	Thr	Ile	Arg	Val	Pro	Gly	Ala	Ser	Arg	Ile	His	Phe	Asn	Phe
			245						250					255	
Thr	Leu	Phe	Asp	Ile	Arg	Asp	Ser	Ala	Asp	Met	Val	Glu	Leu	Leu	Asp
			260					265					270		
Gly	Tyr	Thr	His	Arg	Val	Leu	Val	Arg	Leu	Ser	Gly	Arg	Ser	Arg	Pro
	275						280					285			
Pro	Leu	Ser	Phe	Asn	Val	Ser	Leu	Asp	Phe	Val	Ile	Leu	Tyr	Phe	Phe
	290					295					300				
Ser	Asp	Arg	Ile	Asn	Gln	Ala	Gln	Gly	Phe	Ala	Val	Leu	Tyr	Gln	Ala
305					310					315					320
Thr	Lys	Glu	Glu	Pro	Pro	Gln	Glu	Arg	Pro	Ala	Val	Asn	Gln	Thr	Leu
			325						330					335	
Ala	Glu	Val	Ile	Thr	Glu	Gln	Ala	Asn	Leu	Ser	Val	Ser	Ala	Ala	His
			340					345					350		
Ser	Ser	Lys	Val	Leu	Tyr	Val	Ile	Thr	Pro	Ser	Pro	Ser	His	Pro	Pro
		355					360					365			
Gln	Thr	Ala	Gln	Val	Ala	Ile	Pro	Gly	His	Arg	Gln	Leu	Gly	Pro	Thr
	370					375					380				
Ala	Thr	Glu	Trp	Lys	Asp	Gly	Leu	Cys	Thr	Ala	Trp	Arg	Pro	Ser	Ser
385					390					395					400
Ser	Ser	Gln	Ser	Gln	Gln	Leu	Ser	Gln	Arg	Phe	Phe	Cys	Met	Ser	His
			405						410					415	
Leu	Asn	Leu	Ile	Glu	Ser	Leu	His	Gln	Glu	Thr	Leu	Gly	Thr	Val	Val
			420					425					430		
Ser	Leu	Gly	Leu	Leu	Glu	Ile	Ser	Gly	Pro	Phe	Ser	Met	Asn	Leu	Pro
	435						440					445			
Leu	Gln	Ser	Pro	Ser	Leu	Arg	Arg	Ser	Ser	Arg	Val	Arg	Val	Asn	Lys
	450					455					460				
Met	Thr	Ala	Ile	Pro	Ser										
465					470										

<210> 440
 <211> 760
 <212> PRT
 <213> Mus sp.

<400> 440
 Met Ala Leu Pro Ser Leu Gly Gln Asp Ser Trp Ser Leu Leu Arg Val
 1 5 10 15
 Phe Phe Phe Gln Leu Phe Leu Leu Pro Ser Leu Pro Pro Ala Ser Gly
 20 25 30
 Thr Gly Gly Gln Gly Pro Met Pro Arg Val Lys Tyr His Ala Gly Asp
 35 40 45
 Gly His Arg Ala Leu Ser Phe Phe Gln Gln Lys Gly Leu Arg Asp Phe

50	55	60
Asp Thr Leu Leu Leu Ser	Asp Asp Gly Asn Thr Leu Tyr Val Gly Ala	
65	70	75
Arg Glu Thr Val Leu Ala Leu Asn Ile Gln Asn Pro Gly Ile Pro Arg		80
	85	90
Leu Lys Asn Met Ile Pro Trp Pro Ala Ser Glu Arg Lys Lys Thr Glu		95
	100	105
Cys Ala Phe Lys Lys Lys Ser Asn Glu Thr Gln Cys Phe Asn Phe Ile		110
	115	120
Arg Val Leu Val Ser Tyr Asn Ala Thr His Leu Tyr Ala Cys Gly Thr		125
	130	135
Phe Ala Phe Ser Pro Ala Cys Thr Phe Ile Glu Leu Gln Asp Ser Leu		140
	145	150
Leu Leu Pro Ile Leu Ile Asp Lys Val Met Asp Gly Lys Gly Gln Ser		155
	165	170
Pro Leu Thr Leu Phe Thr Ser Thr Gln Ala Val Leu Val Asp Gly Met		175
	180	185
Leu Tyr Ser Gly Thr Met Asn Asn Phe Leu Gly Ser Glu Pro Ile Leu		190
	195	200
Met Arg Thr Leu Gly Ser His Pro Val Leu Lys Thr Asp Ile Phe Leu		205
	210	215
Arg Trp Leu His Ala Asp Ala Ser Phe Val Ala Ile Pro Ser Thr		220
	225	230
Gln Val Val Tyr Phe Phe Phe Glu Glu Thr Ala Ser Glu Phe Asp Phe		235
	245	250
Phe Glu Glu Leu Tyr Ile Ser Arg Val Ala Gln Val Cys Lys Asn Asp		255
	260	265
Val Gly Gly Glu Lys Leu Leu Gln Lys Lys Trp Thr Thr Phe Leu Lys		270
	275	280
Ala Gln Leu Leu Cys Ala Gln Pro Gly Gln Leu Pro Phe Asn Ile Ile		285
	290	295
Arg His Ala Val Leu Leu Pro Ala Asp Ser Pro Ser Val Ser Arg Ile		300
	305	310
Tyr Ala Val Phe Thr Ser Gln Trp Gln Val Gly Gly Thr Arg Ser Ser		315
	325	330
Ala Val Cys Ala Phe Ser Leu Thr Asp Ile Glu Arg Val Phe Lys Gly		335
	340	345
Lys Tyr Lys Glu Leu Asn Lys Glu Thr Ser Arg Trp Thr Thr Tyr Arg		350
	355	360
Gly Ser Glu Val Ser Pro Arg Pro Gly Ser Cys Ser Met Gly Pro Ser		365
	370	375
Ser Asp Lys Ala Leu Thr Phe Met Lys Asp His Phe Leu Met Asp Glu		380
	385	390
His Val Val Gly Thr Pro Leu Leu Val Lys Ser Gly Val Glu Tyr Thr		395
	405	410
Arg Leu Ala Val Glu Ser Ala Arg Gly Leu Asp Gly Ser Ser His Val		415
	420	425
Val Met Tyr Leu Gly Thr Ser Thr Gly Pro Leu His Lys Ala Val Val		430
	435	440
Pro Gln Asp Ser Ser Ala Tyr Leu Val Glu Glu Ile Gln Leu Ser Pro		445
	450	455
Asp Ser Glu Pro Val Arg Asn Leu Gln Leu Ala Pro Ala Gln Gly Ala		460
	465	470
Val Phe Ala Gly Phe Ser Gly Gly Ile Trp Arg Val Pro Arg Ala Asn		475
	485	490
Cys Ser Val Tyr Glu Ser Cys Val Asp Cys Val Leu Ala Arg Asp Pro		495
	500	505
		510

His	Cys	Ala	Trp	Asp	Pro	Glu	Ser	Arg	Leu	Cys	Ser	Leu	Leu	Ser	Gly
		515					520					525			
Ser	Thr	Lys	Pro	Trp	Lys	Gln	Asp	Met	Glu	Arg	Gly	Asn	Pro	Glu	Trp
		530				535					540				
Val	Cys	Thr	Arg	Gly	Pro	Met	Ala	Arg	Ser	Pro	Arg	Arg	Gln	Ser	Pro
545					550					555					560
Pro	Gln	Leu	Ile	Lys	Glu	Val	Leu	Thr	Val	Pro	Asn	Ser	Ile	Leu	Glu
				565					570						575
Leu	Arg	Cys	Pro	His	Leu	Ser	Ala	Leu	Ala	Ser	Tyr	His	Trp	Ser	His
			580					585					590		
Gly	Arg	Ala	Lys	Ile	Ser	Glu	Ala	Ser	Ala	Thr	Val	Tyr	Asn	Gly	Ser
		595					600					605			
Leu	Leu	Leu	Leu	Pro	Gln	Asp	Gly	Val	Gly	Gly	Leu	Tyr	Gln	Cys	Val
	610					615					620				
Ala	Thr	Glu	Asn	Gly	Tyr	Ser	Tyr	Pro	Val	Val	Ser	Tyr	Trp	Val	Asp
625					630					635					640
Ser	Gln	Asp	Gln	Pro	Leu	Ala	Leu	Asp	Pro	Glu	Leu	Ala	Gly	Val	Pro
				645					650					655	
Arg	Glu	Arg	Val	Gln	Val	Pro	Leu	Thr	Arg	Val	Gly	Gly	Gly	Ala	Ser
			660					665						670	
Met	Ala	Ala	Gln	Arg	Ser	Tyr	Trp	Pro	His	Phe	Leu	Ile	Val	Thr	Val
		675					680				685				
Leu	Leu	Ala	Ile	Val	Leu	Leu	Gly	Val	Leu	Thr	Leu	Leu	Leu	Ala	Ser
	690					695					700				
Pro	Leu	Gly	Ala	Leu	Arg	Ala	Arg	Gly	Lys	Val	Gln	Gly	Cys	Gly	Met
705					710					715					720
Leu	Pro	Pro	Arg	Glu	Lys	Ala	Pro	Leu	Ser	Arg	Asp	Gln	His	Leu	Gln
				725					730					735	
Pro	Ser	Lys	Asp	His	Arg	Thr	Ser	Ala	Ser	Asp	Val	Asp	Ala	Asp	Asn
			740					745					750		
Asn	His	Leu	Gly	Ala	Glu	Val	Ala								
		755					760								

<210> 441
 <211> 3046
 <212> PRT
 <213> Mus sp.

<400> 441															
Cys	Thr	Cys	Gly	Gly	Ala	Cys	Gly	Cys	Cys	Thr	Gly	Gly	Gly	Thr	Thr
1				5					10					15	
Ala	Gly	Gly	Gly	Gly	Thr	Cys	Thr	Gly	Thr	Ala	Cys	Thr	Gly	Cys	Thr
			20					25					30		
Gly	Gly	Gly	Gly	Ala	Ala	Cys	Cys	Ala	Thr	Cys	Thr	Gly	Gly	Thr	Gly
			35				40					45			
Ala	Cys	Cys	Ala	Thr	Cys	Thr	Cys	Ala	Gly	Gly	Cys	Thr	Gly	Ala	Cys
	50					55					60				
Cys	Ala	Thr	Gly	Gly	Cys	Cys	Cys	Thr	Ala	Cys	Cys	Ala	Thr	Cys	Cys
65					70					75					80
Cys	Thr	Gly	Gly	Gly	Cys	Cys	Ala	Gly	Gly	Ala	Cys	Thr	Cys	Ala	Thr
				85				90						95	
Gly	Gly	Ala	Gly	Thr	Cys	Thr	Cys	Cys	Thr	Gly	Cys	Gly	Thr	Gly	Thr
			100				105						110		
Thr	Thr	Thr	Thr	Thr	Thr	Cys	Thr	Thr	Cys	Cys	Ala	Ala	Cys	Thr	Cys
		115					120					125			
Thr	Thr	Cys	Cys	Thr	Gly	Cys	Thr	Gly	Cys	Cys	Ala	Thr	Cys	Ala	Cys

130	135	140
Thr Gly Cys Cys Ala Cys Cys Thr Gly Cys Thr Thr Cys Thr Gly Gly		
145	150	155
Gly Ala Cys Thr Gly Thr Gly Gly Thr Cys Ala Gly Gly Gly Gly		
	165	170
Cys Cys Cys Ala Thr Gly Cys Cys Cys Ala Gly Ala Gly Thr Cys Ala		
	180	185
Ala Ala Thr Ala Cys Cys Ala Thr Gly Cys Thr Gly Gly Ala Gly Ala		
	195	200
Cys Gly Gly Gly Cys Ala Cys Ala Gly Gly Gly Cys Cys Cys Thr Cys		
	210	215
Ala Gly Cys Thr Thr Cys Thr Thr Cys Cys Ala Ala Cys Ala Ala Ala		
225	230	235
Ala Ala Gly Gly Cys Cys Thr Cys Cys Gly Ala Gly Ala Cys Thr Thr		
	245	250
Thr Gly Ala Cys Ala Cys Gly Cys Thr Gly Cys Thr Cys Cys Thr Gly		
	260	265
Ala Gly Thr Gly Ala Cys Gly Ala Thr Gly Gly Cys Ala Ala Cys Ala		
	275	280
Cys Thr Cys Thr Cys Thr Ala Thr Gly Thr Gly Gly Gly Gly Cys		
	290	295
Thr Cys Gly Ala Gly Ala Gly Ala Cys Cys Gly Thr Cys Cys Thr Gly		
305	310	315
Gly Cys Cys Thr Thr Gly Ala Ala Thr Ala Thr Cys Cys Ala Gly Ala		
	325	330
Ala Cys Cys Cys Ala Gly Gly Ala Ala Thr Cys Cys Cys Ala Ala Gly		
	340	345
Gly Cys Thr Ala Ala Ala Gly Ala Ala Cys Ala Thr Gly Ala Thr Ala		
	355	360
Cys Cys Cys Thr Gly Gly Cys Cys Ala Gly Cys Cys Ala Gly Thr Gly		
	370	375
Ala Gly Ala Gly Ala Ala Ala Ala Ala Gly Ala Cys Cys Gly Ala		
385	390	395
Ala Thr Gly Thr Gly Cys Cys Thr Thr Thr Ala Ala Gly Ala Ala Gly		
	405	410
Ala Ala Gly Ala Gly Cys Ala Ala Thr Gly Ala Gly Ala Cys Ala Cys		
	420	425
Ala Gly Thr Gly Thr Thr Thr Cys Ala Ala Cys Thr Thr Cys Ala Thr		
	435	440
Thr Cys Gly Ala Gly Thr Cys Cys Thr Gly Gly Thr Cys Thr Cys Thr		
	450	455
Thr Ala Cys Ala Ala Thr Gly Cys Thr Ala Cys Thr Cys Ala Cys Cys		
465	470	475
Thr Cys Thr Ala Thr Gly Cys Cys Thr Gly Thr Gly Gly Ala Cys		
	485	490
Cys Thr Thr Thr Gly Cys Cys Thr Thr Cys Ala Gly Cys Cys Cys Thr		
	500	505
Gly Cys Cys Thr Gly Thr Ala Cys Cys Thr Thr Cys Ala Thr Thr Gly		
	515	520
Ala Ala Cys Thr Cys Cys Ala Ala Gly Ala Thr Thr Cys Cys Cys Thr		
	530	535
Cys Cys Thr Gly Thr Thr Gly Cys Cys Cys Ala Thr Cys Thr Thr Gly		
545	550	555
Ala Thr Ala Gly Ala Cys Ala Ala Gly Gly Thr Cys Ala Thr Gly Gly		
	565	570
Ala Cys Gly Gly Gly Ala Ala Gly Gly Gly Cys Cys Ala Ala Gly		
	580	585
		590

Cys	Cys	Cys	Thr	Thr	Thr	Gly	Ala	Cys	Cys	Cys	Thr	Gly	Thr	Thr	Cys
		595					600					605			
Ala	Cys	Ala	Ala	Gly	Cys	Ala	Cys	Ala	Cys	Ala	Ala	Gly	Cys	Thr	Gly
	610					615					620				
Thr	Cys	Thr	Thr	Gly	Gly	Thr	Cys	Gly	Ala	Thr	Gly	Gly	Gly	Ala	Thr
625				630						635					640
Gly	Cys	Thr	Thr	Thr	Ala	Thr	Thr	Cys	Cys	Gly	Gly	Cys	Ala	Cys	Cys
				645					650					655	
Ala	Thr	Gly	Ala	Ala	Cys	Ala	Ala	Cys	Thr	Thr	Cys	Cys	Thr	Gly	Gly
		660						665					670		
Gly	Cys	Ala	Gly	Cys	Gly	Ala	Gly	Cys	Cys	Cys	Ala	Thr	Cys	Cys	Thr
	675						680					685			
Gly	Ala	Thr	Gly	Cys	Gly	Gly	Ala	Cys	Ala	Cys	Thr	Gly	Gly	Gly	Ala
	690					695					700				
Thr	Cys	Cys	Cys	Ala	Thr	Cys	Cys	Thr	Gly	Thr	Thr	Cys	Thr	Cys	Ala
705					710					715					720
Ala	Gly	Ala	Cys	Thr	Gly	Ala	Cys	Ala	Thr	Cys	Thr	Thr	Cys	Thr	Thr
				725					730						735
Ala	Cys	Gly	Cys	Thr	Gly	Gly	Cys	Thr	Gly	Cys	Ala	Cys	Gly	Cys	Gly
		740						745					750		
Gly	Ala	Thr	Gly	Cys	Cys	Thr	Cys	Cys	Thr	Thr	Cys	Gly	Thr	Gly	Gly
	755						760					765			
Cys	Ala	Gly	Cys	Cys	Ala	Thr	Thr	Cys	Cys	Ala	Thr	Cys	Cys	Ala	Cys
	770					775					780				
Cys	Cys	Ala	Gly	Gly	Thr	Cys	Gly	Thr	Cys	Thr	Ala	Thr	Thr	Thr	Cys
785					790					795					800
Thr	Thr	Cys	Thr	Thr	Thr	Gly	Ala	Gly	Gly	Ala	Gly	Ala	Cys	Ala	Gly
				805					810						815
Cys	Cys	Ala	Gly	Cys	Gly	Ala	Gly	Thr	Thr	Thr	Gly	Ala	Cys	Thr	Thr
		820						825					830		
Cys	Thr	Thr	Thr	Gly	Ala	Ala	Gly	Ala	Gly	Cys	Thr	Gly	Thr	Ala	Thr
	835						840					845			
Ala	Thr	Ala	Thr	Cys	Cys	Ala	Gly	Gly	Gly	Thr	Gly	Gly	Cys	Thr	Cys
	850					855					860				
Ala	Ala	Gly	Thr	Cys	Thr	Gly	Cys	Ala	Ala	Gly	Ala	Ala	Cys	Gly	Ala
865					870					875					880
Cys	Gly	Thr	Gly	Gly	Gly	Cys	Gly	Gly	Thr	Gly	Ala	Ala	Ala	Ala	Gly
				885					890						895
Cys	Thr	Gly	Cys	Thr	Gly	Cys	Ala	Gly	Ala	Ala	Gly	Ala	Ala	Gly	Thr
	900							905					910		
Gly	Gly	Ala	Cys	Cys	Ala	Cys	Cys	Thr	Thr	Cys	Cys	Thr	Cys	Ala	Ala
	915						920					925			
Ala	Gly	Cys	Cys	Cys	Ala	Gly	Thr	Thr	Gly	Cys	Thr	Cys	Thr	Gly	Cys
	930					935					940				
Gly	Cys	Thr	Cys	Ala	Gly	Cys	Cys	Ala	Gly	Gly	Gly	Cys	Ala	Gly	Cys
945					950					955					960
Thr	Gly	Cys	Cys	Ala	Thr	Thr	Cys	Ala	Ala	Cys	Ala	Thr	Cys	Ala	Thr
				965					970						975
Cys	Cys	Gly	Cys	Cys	Ala	Cys	Gly	Cys	Gly	Gly	Thr	Cys	Cys	Thr	Gly
		980						985					990		
Cys	Thr	Gly	Cys	Cys	Cys	Gly	Cys	Cys	Gly	Ala	Thr	Thr	Cys	Thr	Cys
	995						1000					1005			
Cys	Cys	Thr	Cys	Thr	Gly	Thr	Thr	Thr	Cys	Cys	Cys	Gly	Cys	Ala	Thr
	1010					1015						1020			
Cys	Thr	Ala	Cys	Gly	Cys	Ala	Gly	Thr	Cys	Thr	Thr	Thr	Ala	Cys	Cys
1025					1030					1035					1040
Thr	Cys	Cys	Cys	Ala	Gly	Thr	Gly	Gly	Cys	Ala	Gly	Gly	Thr	Thr	Gly

Ala	Gly	Thr	Gly	Thr	Thr	Thr	Gly	Cys	Ala	Gly	Gly	Cys	Thr	Thr	Cys
1505						1510				1515					1520
Thr	Cys	Thr	Gly	Gly	Ala	Gly	Gly	Cys	Ala	Thr	Cys	Thr	Gly	Gly	Ala
				1525					1530						1535
Gly	Ala	Gly	Thr	Thr	Cys	Cys	Cys	Ala	Gly	Gly	Gly	Cys	Cys	Ala	Ala
			1540					1545					1550		
Thr	Thr	Gly	Cys	Ala	Gly	Thr	Gly	Thr	Cys	Thr	Ala	Cys	Gly	Ala	Gly
		1555					1560					1565			
Ala	Gly	Cys	Thr	Gly	Thr	Gly	Thr	Gly	Gly	Ala	Cys	Thr	Gly	Thr	Gly
	1570					1575				1580					
Thr	Gly	Cys	Thr	Thr	Gly	Cys	Cys	Ala	Gly	Gly	Gly	Ala	Cys	Cys	Cys
1585					1590				1595						1600
Thr	Cys	Ala	Cys	Thr	Gly	Thr	Gly	Cys	Cys	Thr	Gly	Gly	Gly	Ala	Cys
				1605					1610						1615
Cys	Cys	Thr	Gly	Ala	Ala	Thr	Cys	Ala	Ala	Gly	Ala	Cys	Thr	Cys	Thr
		1620						1625					1630		
Gly	Cys	Ala	Gly	Cys	Cys	Thr	Thr	Cys	Thr	Gly	Thr	Cys	Thr	Gly	Gly
		1635						1640					1645		
Cys	Thr	Cys	Thr	Ala	Cys	Cys	Ala	Ala	Gly	Cys	Cys	Thr	Thr	Gly	Gly
	1650					1655				1660					
Ala	Ala	Gly	Cys	Ala	Gly	Gly	Ala	Cys	Ala	Thr	Gly	Gly	Ala	Ala	Cys
1665					1670					1675					1680
Gly	Cys	Gly	Gly	Cys	Ala	Ala	Cys	Cys	Cys	Gly	Gly	Ala	Gly	Thr	Gly
				1685					1690						1695
Gly	Gly	Thr	Ala	Thr	Gly	Cys	Ala	Cys	Cys	Cys	Gly	Thr	Gly	Gly	Cys
		1700						1705					1710		
Cys	Cys	Cys	Ala	Thr	Gly	Gly	Cys	Cys	Ala	Gly	Gly	Ala	Gly	Cys	Cys
		1715						1720					1725		
Cys	Cys	Cys	Gly	Gly	Cys	Gly	Thr	Cys	Ala	Gly	Ala	Gly	Cys	Cys	Cys
	1730					1735				1740					
Cys	Cys	Cys	Thr	Cys	Ala	Ala	Cys	Thr	Ala	Ala	Thr	Thr	Ala	Ala	Ala
1745					1750					1755					1760
Gly	Ala	Ala	Gly	Thr	Cys	Cys	Thr	Gly	Ala	Cys	Ala	Gly	Thr	Cys	Cys
			1765						1770						1775
Cys	Cys	Ala	Ala	Cys	Thr	Cys	Cys	Ala	Thr	Cys	Cys	Thr	Gly	Gly	Ala
		1780						1785					1790		
Gly	Cys	Thr	Gly	Cys	Gly	Cys	Thr	Gly	Cys	Cys	Cys	Cys	Cys	Ala	Cys
		1795						1800					1805		
Cys	Thr	Gly	Thr	Cys	Ala	Gly	Cys	Ala	Cys	Thr	Gly	Gly	Cys	Cys	Thr
	1810					1815					1820				
Cys	Thr	Thr	Ala	Cys	Cys	Ala	Cys	Thr	Gly	Gly	Ala	Gly	Thr	Cys	Ala
1825					1830					1835					1840
Thr	Gly	Gly	Cys	Cys	Gly	Ala	Gly	Cys	Cys	Ala	Ala	Ala	Ala	Thr	Cys
			1845						1850						1855
Thr	Cys	Ala	Gly	Ala	Ala	Gly	Cys	Cys	Thr	Cys	Thr	Gly	Cys	Thr	Ala
		1860						1865					1870		
Cys	Cys	Gly	Thr	Cys	Thr	Ala	Cys	Ala	Ala	Thr	Gly	Gly	Cys	Thr	Cys
		1875						1880					1885		
Cys	Cys	Thr	Cys	Thr	Thr	Gly	Cys	Thr	Gly	Cys	Thr	Gly	Cys	Cys	Gly
	1890					1895					1900				
Cys	Ala	Gly	Gly	Ala	Thr	Gly	Gly	Thr	Gly	Thr	Cys	Gly	Gly	Gly	Gly
1905					1910					1915					1920
Gly	Cys	Cys	Thr	Cys	Thr	Ala	Cys	Cys	Ala	Gly	Thr	Gly	Thr	Gly	Thr
			1925						1930						1935
Gly	Gly	Cys	Gly	Ala	Cys	Thr	Gly	Ala	Gly	Ala	Ala	Cys	Gly	Gly	Cys
			1940						1945				1950		
Thr	Ala	Cys	Thr	Cys	Ala	Thr	Ala	Cys	Cys	Cys	Thr	Gly	Thr	Gly	Gly

Cys Ala Cys Thr Cys Thr Gly Ala Cys Cys Ala Gly Gly Gly Thr Ala
2420 2425 2430
Gly Gly Ala Gly Gly Cys Thr Cys Thr Cys Cys Thr Gly Cys Thr Ala
2435 2440 2445
Ala Cys Gly Thr Gly Thr Gly Thr Cys Ala Cys Cys Thr Ala Cys Ala
2450 2455 2460
Gly Cys Ala Cys Cys Cys Ala Gly Thr Ala Gly Gly Thr Cys Cys Thr
2465 2470 2475 2480
Cys Cys Cys Cys Thr Gly Thr Gly Gly Gly Ala Cys Thr Cys Thr Cys
2485 2490 2495
Thr Thr Cys Thr Gly Cys Ala Ala Gly Cys Ala Cys Ala Thr Thr Gly
2500 2505 2510
Gly Gly Cys Thr Gly Thr Cys Thr Cys Cys Ala Thr Ala Cys Cys Thr
2515 2520 2525
Gly Thr Ala Cys Thr Thr Gly Thr Gly Cys Thr Gly Thr Gly Ala Cys
2530 2535 2540
Ala Gly Gly Ala Ala Gly Ala Gly Cys Cys Ala Gly Ala Cys Ala Gly
2545 2550 2555 2560
Gly Thr Thr Thr Cys Thr Thr Thr Gly Ala Thr Thr Thr Thr Gly Ala
2565 2570 2575
Thr Thr Gly Ala Cys Cys Cys Ala Ala Gly Ala Gly Cys Cys Cys Thr
2580 2585 2590
Gly Cys Cys Thr Gly Thr Ala Ala Cys Ala Ala Ala Cys Gly Thr Gly
2595 2600 2605
Cys Thr Cys Cys Ala Gly Gly Ala Gly Ala Cys Cys Ala Thr Gly Ala
2610 2615 2620
Ala Ala Gly Gly Thr Gly Thr Gly Gly Cys Thr Gly Thr Cys Thr Gly
2625 2630 2635 2640
Gly Gly Ala Thr Thr Cys Thr Gly Thr Gly Gly Thr Gly Ala Cys Ala
2645 2650 2655
Ala Ala Cys Cys Thr Ala Ala Gly Cys Ala Thr Cys Cys Gly Ala Gly
2660 2665 2670
Cys Ala Ala Gly Cys Thr Gly Gly Gly Cys Thr Ala Thr Thr Cys
2675 2680 2685
Cys Thr Gly Cys Ala Ala Ala Cys Thr Cys Cys Ala Thr Cys Cys Thr
2690 2695 2700
Gly Ala Ala Cys Gly Cys Thr Gly Thr Cys Ala Cys Thr Cys Thr Ala
2705 2710 2715 2720
Gly Ala Ala Gly Cys Ala Gly Cys Thr Gly Cys Thr Gly Cys Thr Thr
2725 2730 2735
Thr Gly Ala Ala Cys Ala Cys Cys Ala Gly Cys Cys Cys Ala Cys Cys
2740 2745 2750
Cys Thr Cys Cys Thr Thr Cys Cys Cys Ala Ala Gly Ala Gly Thr Cys
2755 2760 2765
Thr Cys Thr Ala Thr Gly Gly Ala Gly Thr Thr Gly Gly Cys Cys Cys
2770 2775 2780
Cys Thr Thr Gly Thr Gly Thr Thr Thr Cys Cys Thr Thr Thr Ala Cys
2785 2790 2795 2800
Cys Ala Gly Thr Cys Gly Gly Gly Cys Cys Ala Thr Ala Cys Thr Gly
2805 2810 2815
Thr Thr Thr Gly Gly Gly Ala Ala Gly Thr Cys Ala Thr Cys Thr Cys
2820 2825 2830
Thr Gly Ala Ala Gly Thr Cys Thr Ala Ala Cys Cys Ala Cys Cys Thr
2835 2840 2845
Thr Cys Cys Thr Thr Cys Thr Thr Gly Gly Thr Thr Cys Ala Gly Thr
2850 2855 2860
Thr Thr Gly Gly Ala Cys Ala Gly Ala Thr Thr Gly Thr Thr Ala Thr

2865		2870		2875		2880									
Thr	Ala	Thr	Thr	Gly	Thr	Cys	Thr	Cys	Thr	Gly	Cys	Cys	Cys	Thr	Gly
				2885				2890						2895	
Gly	Cys	Thr	Ala	Gly	Ala	Ala	Thr	Gly	Gly	Gly	Gly	Gly	Cys	Ala	Thr
			2900					2905						2910	
Ala	Ala	Thr	Cys	Thr	Gly	Ala	Gly	Cys	Cys	Thr	Thr	Gly	Thr	Thr	Cys
		2915					2920					2925			
Cys	Cys	Thr	Thr	Gly	Thr	Cys	Cys	Ala	Gly	Thr	Gly	Thr	Gly	Gly	Cys
	2930					2935				2940					
Thr	Gly	Ala	Cys	Cys	Cys	Thr	Thr	Gly	Ala	Cys	Cys	Thr	Cys	Thr	Thr
2945					2950				2955					2960	
Cys	Cys	Thr	Thr	Cys	Cys	Thr	Cys	Cys	Thr	Cys	Cys	Cys	Thr	Thr	Thr
			2965					2970					2975		
Gly	Thr	Thr	Thr	Thr	Gly	Gly	Gly	Ala	Thr	Thr	Cys	Ala	Gly	Ala	Ala
			2980					2985					2990		
Ala	Ala	Cys	Thr	Gly	Cys	Thr	Thr	Gly	Thr	Cys	Ala	Cys	Ala	Gly	Ala
		2995					3000					3005			
Cys	Ala	Ala	Thr	Thr	Thr	Ala	Thr	Thr	Thr	Thr	Thr	Thr	Ala	Thr	Thr
	3010					3015				3020					
Ala	Ala	Ala	Ala	Ala	Ala	Gly	Ala	Thr	Ala	Thr	Ala	Ala	Gly	Cys	Thr
3025					3030				3035					3040	
Thr	Thr	Ala	Ala	Ala	Gly										
				3045											

<210> 442

<220>

<223> Unknown

<400> 442

000

<210> 443

<220>

<223> Unknown

<400> 443

000

<210> 444

<220>

<223> Unknown

<400> 444

000

<210> 445

<211> 398

<212> PRT

<213> Homo sapiens

<400> 445

Met	Trp	Leu	Leu	Leu	Thr	Met	Ala	Ser	Leu	Ile	Ser	Val	Leu	Gly	Thr
1				5					10					15	

Thr	His	Gly	Leu	Phe	Gly	Lys	Leu	His	Pro	Gly	Ser	Pro	Glu	Val	Thr
			20					25					30		
Met	Asn	Ile	Ser	Gln	Met	Ile	Thr	Tyr	Trp	Gly	Tyr	Pro	Asn	Glu	Glu
		35					40					45			
Tyr	Glu	Val	Val	Thr	Glu	Asp	Gly	Tyr	Ile	Leu	Glu	Val	Asn	Arg	Ile
	50					55					60				
Pro	Tyr	Gly	Lys	Lys	Asn	Ser	Gly	Asn	Thr	Gly	Gln	Arg	Pro	Val	Val
65					70					75					80
Phe	Leu	Gln	His	Gly	Leu	Leu	Ala	Ser	Ala	Thr	Asn	Trp	Ile	Ser	Asn
				85					90					95	
Leu	Pro	Asn	Asn	Ser	Leu	Ala	Phe	Ile	Leu	Ala	Asp	Ala	Gly	Tyr	Asp
		100						105					110		
Val	Trp	Leu	Gly	Asn	Ser	Arg	Gly	Asn	Thr	Trp	Ala	Arg	Arg	Asn	Leu
	115						120					125			
Tyr	Tyr	Ser	Pro	Asp	Ser	Val	Glu	Phe	Trp	Ala	Phe	Ser	Phe	Asp	Glu
	130					135					140				
Met	Ala	Lys	Tyr	Asp	Leu	Pro	Ala	Thr	Ile	Asp	Phe	Ile	Val	Lys	Lys
145					150					155					160
Thr	Gly	Gln	Lys	Gln	Leu	His	Tyr	Val	Gly	His	Ser	Gln	Gly	Thr	Thr
				165					170					175	
Ile	Gly	Phe	Ile	Ala	Phe	Ser	Thr	Asn	Pro	Ser	Leu	Ala	Lys	Arg	Ile
		180						185					190		
Lys	Thr	Phe	Tyr	Ala	Leu	Ala	Pro	Val	Ala	Thr	Val	Lys	Tyr	Thr	Lys
	195						200					205			
Ser	Leu	Ile	Asn	Lys	Leu	Arg	Phe	Val	Pro	Gln	Ser	Leu	Phe	Lys	Phe
	210					215					220				
Ile	Phe	Gly	Asp	Lys	Ile	Phe	Tyr	Pro	His	Asn	Phe	Phe	Asp	Gln	Phe
225					230					235					240
Leu	Ala	Thr	Glu	Val	Cys	Ser	Arg	Glu	Met	Leu	Asn	Leu	Leu	Cys	Ser
				245					250					255	
Asn	Ala	Leu	Phe	Ile	Ile	Cys	Gly	Phe	Asp	Ser	Lys	Asn	Phe	Asn	Thr
			260					265					270		
Ser	Arg	Leu	Asp	Val	Tyr	Leu	Ser	His	Asn	Pro	Ala	Gly	Thr	Ser	Val
	275					280						285			
Gln	Asn	Met	Phe	His	Trp	Thr	Gln	Ala	Val	Lys	Ser	Gly	Lys	Phe	Gln
	290					295						300			
Ala	Tyr	Asp	Trp	Gly	Ser	Pro	Val	Gln	Asn	Arg	Met	His	Tyr	Asp	Gln
305					310					315					320
Ser	Gln	Pro	Pro	Tyr	Asn	Val	Thr	Ala	Met	Asn	Val	Pro	Ile	Ala	
				325					330					335	
Val	Trp	Asn	Gly	Gly	Lys	Asp	Leu	Leu	Ala	Asp	Pro	Gln	Asp	Val	Gly
			340					345					350		
Leu	Leu	Leu	Pro	Lys	Leu	Pro	Asn	Leu	Ile	Tyr	His	Lys	Glu	Ile	Pro
		355					360					365			
Phe	Tyr	Asn	His	Leu	Asp	Phe	Ile	Trp	Ala	Met	Asp	Ala	Pro	Gln	Glu
	370					375					380				
Val	Tyr	Asn	Asp	Ile	Val	Ser	Met	Ile	Ser	Glu	Asp	Lys	Lys		
385					390					395					

<210> 446
 <211> 760
 <212> PRT
 <213> Mus sp.

<400> 446
 Met Ala Leu Pro Ser Leu Gly Gln Asp Ser Trp Ser Leu Leu Arg Val

1				5				10					15			
Phe	Phe	Phe	Gln	Leu	Phe	Leu	Leu	Pro	Ser	Leu	Pro	Pro	Ala	Ser	Gly	
			20					25					30			
Thr	Gly	Gly	Gln	Gly	Pro	Met	Pro	Arg	Val	Lys	Tyr	His	Ala	Gly	Asp	
		35					40					45				
Gly	His	Arg	Ala	Leu	Ser	Phe	Phe	Gln	Gln	Lys	Gly	Leu	Arg	Asp	Phe	
	50					55					60					
Asp	Thr	Leu	Leu	Leu	Ser	Asp	Asp	Gly	Asn	Thr	Leu	Tyr	Val	Gly	Ala	
65				70					75						80	
Arg	Glu	Thr	Val	Leu	Ala	Leu	Asn	Ile	Gln	Asn	Pro	Gly	Ile	Pro	Arg	
			85					90						95		
Leu	Lys	Asn	Met	Ile	Pro	Trp	Pro	Ala	Ser	Glu	Arg	Lys	Lys	Thr	Glu	
		100					105						110			
Cys	Ala	Phe	Lys	Lys	Lys	Ser	Asn	Glu	Thr	Gln	Cys	Phe	Asn	Phe	Ile	
		115					120					125				
Arg	Val	Leu	Val	Ser	Tyr	Asn	Ala	Thr	His	Leu	Tyr	Ala	Cys	Gly	Thr	
	130					135					140					
Phe	Ala	Phe	Ser	Pro	Ala	Cys	Thr	Phe	Ile	Glu	Leu	Gln	Asp	Ser	Leu	
145				150						155					160	
Leu	Leu	Pro	Ile	Leu	Ile	Asp	Lys	Val	Met	Asp	Gly	Lys	Gly	Gln	Ser	
			165				170							175		
Pro	Leu	Thr	Leu	Phe	Thr	Ser	Thr	Gln	Ala	Val	Leu	Val	Asp	Gly	Met	
			180					185					190			
Leu	Tyr	Ser	Gly	Thr	Met	Asn	Asn	Phe	Leu	Gly	Ser	Glu	Pro	Ile	Leu	
	195					200						205				
Met	Arg	Thr	Leu	Gly	Ser	His	Pro	Val	Leu	Lys	Thr	Asp	Ile	Phe	Leu	
	210					215					220					
Arg	Trp	Leu	His	Ala	Asp	Ala	Ser	Phe	Val	Ala	Ala	Ile	Pro	Ser	Thr	
225				230						235					240	
Gln	Val	Val	Tyr	Phe	Phe	Phe	Glu	Glu	Thr	Ala	Ser	Glu	Phe	Asp	Phe	
			245					250						255		
Phe	Glu	Glu	Leu	Tyr	Ile	Ser	Arg	Val	Ala	Gln	Val	Cys	Lys	Asn	Asp	
			260					265					270			
Val	Gly	Gly	Glu	Lys	Leu	Leu	Gln	Lys	Lys	Trp	Thr	Thr	Phe	Leu	Lys	
		275					280					285				
Ala	Gln	Leu	Leu	Cys	Ala	Gln	Pro	Gly	Gln	Leu	Pro	Phe	Asn	Ile	Ile	
	290					295					300					
Arg	His	Ala	Val	Leu	Leu	Pro	Ala	Asp	Ser	Pro	Ser	Val	Ser	Arg	Ile	
305				310						315					320	
Tyr	Ala	Val	Phe	Thr	Ser	Gln	Trp	Gln	Val	Gly	Gly	Thr	Arg	Ser	Ser	
			325					330						335		
Ala	Val	Cys	Ala	Phe	Ser	Leu	Thr	Asp	Ile	Glu	Arg	Val	Phe	Lys	Gly	
			340					345					350			
Lys	Tyr	Lys	Glu	Leu	Asn	Lys	Glu	Thr	Ser	Arg	Trp	Thr	Thr	Tyr	Arg	
		355					360						365			
Gly	Ser	Glu	Val	Ser	Pro	Arg	Pro	Gly	Ser	Cys	Ser	Met	Gly	Pro	Ser	
	370					375					380					
Ser	Asp	Lys	Ala	Leu	Thr	Phe	Met	Lys	Asp	His	Phe	Leu	Met	Asp	Glu	
385				390						395					400	
His	Val	Val	Gly	Thr	Pro	Leu	Leu	Val	Lys	Ser	Gly	Val	Glu	Tyr	Thr	
			405					410						415		
Arg	Leu	Ala	Val	Glu	Ser	Ala	Arg	Gly	Leu	Asp	Gly	Ser	Ser	His	Val	
			420					425					430			
Val	Met	Tyr	Leu	Gly	Thr	Ser	Thr	Gly	Pro	Leu	His	Lys	Ala	Val	Val	
		435					440					445				
Pro	Gln	Asp	Ser	Ser	Ala	Tyr	Leu	Val	Glu	Glu	Ile	Gln	Leu	Ser	Pro	
	450					455					460					

Asp	Ser	Glu	Pro	Val	Arg	Asn	Leu	Gln	Leu	Ala	Pro	Ala	Gln	Gly	Ala	
465					470					475					480	
Val	Phe	Ala	Gly	Phe	Ser	Gly	Gly	Ile	Trp	Arg	Val	Pro	Arg	Ala	Asn	
				485					490					495		
Cys	Ser	Val	Tyr	Glu	Ser	Cys	Val	Asp	Cys	Val	Leu	Ala	Arg	Asp	Pro	
			500					505					510			
His	Cys	Ala	Trp	Asp	Pro	Glu	Ser	Arg	Leu	Cys	Ser	Leu	Leu	Ser	Gly	
		515				520					525					
Ser	Thr	Lys	Pro	Trp	Lys	Gln	Asp	Met	Glu	Arg	Gly	Asn	Pro	Glu	Trp	
	530				535						540					
Val	Cys	Thr	Arg	Gly	Pro	Met	Ala	Arg	Ser	Pro	Arg	Arg	Gln	Ser	Pro	
545				550						555					560	
Pro	Gln	Leu	Ile	Lys	Glu	Val	Leu	Thr	Val	Pro	Asn	Ser	Ile	Leu	Glu	
				565					570					575		
Leu	Arg	Cys	Pro	His	Leu	Ser	Ala	Leu	Ala	Ser	Tyr	His	Trp	Ser	His	
			580					585					590			
Gly	Arg	Ala	Lys	Ile	Ser	Glu	Ala	Ser	Ala	Thr	Val	Tyr	Asn	Gly	Ser	
	595					600						605				
Leu	Leu	Leu	Leu	Pro	Gln	Asp	Gly	Val	Gly	Gly	Leu	Tyr	Gln	Cys	Val	
610					615						620					
Ala	Thr	Glu	Asn	Gly	Tyr	Ser	Tyr	Pro	Val	Val	Ser	Tyr	Trp	Val	Asp	
625				630						635					640	
Ser	Gln	Asp	Gln	Pro	Leu	Ala	Leu	Asp	Pro	Glu	Leu	Ala	Gly	Val	Pro	
			645						650					655		
Arg	Glu	Arg	Val	Gln	Val	Pro	Leu	Thr	Arg	Val	Gly	Gly	Gly	Ala	Ser	
			660					665						670		
Met	Ala	Ala	Gln	Arg	Ser	Tyr	Trp	Pro	His	Phe	Leu	Ile	Val	Thr	Val	
	675						680						685			
Leu	Leu	Ala	Ile	Val	Leu	Leu	Gly	Val	Leu	Thr	Leu	Leu	Leu	Ala	Ser	
690					695						700					
Pro	Leu	Gly	Ala	Leu	Arg	Ala	Arg	Gly	Lys	Val	Gln	Gly	Cys	Gly	Met	
705				710						715					720	
Leu	Pro	Pro	Arg	Glu	Lys	Ala	Pro	Leu	Ser	Arg	Asp	Gln	His	Leu	Gln	
			725						730					735		
Pro	Ser	Lys	Asp	His	Arg	Thr	Ser	Ala	Ser	Asp	Val	Asp	Ala	Asp	Asn	
			740					745					750			
Asn	His	Leu	Gly	Ala	Glu	Val	Ala									
		755					760									

<210> 447
 <211> 3046
 <212> DNA
 <213> Mus sp.

<400> 447
 ctcgagacgcc tgggttaggg gtctgtactg ctggggaacc atctggtgac catctcaggc 60
 tgaccatggc cctaccatcc ctgggccagg actcatggag tctcctgcgt gtttttttct 120
 tccaactctt cctgctgcc tcaactgcc ctgcttctgg gactggtggt caggggcccc 180
 tgcccagagt caaataccat gctggagacg ggcacagggc cctcagcttc ttccaacaaa 240
 aaggcctccg agactttgac acgctgctcc tgagtgcga tggcaacact ctctatgtgg 300
 gggctcgaga gaccgtcctg gccttgaata tccagaaccc aggaatccca aggctaaaga 360
 acatgatacc ctggccagcc agtgagagaa aaaagaccga atgtgccttt aagaagaaga 420
 gcaatgagac acagtgtttc aacttcattc gagtctgtgt ctcttacaat gctactcacc 480
 tctatgcctg tgggaccttt gccttcagcc ctgcctgtac cttcattgaa ctccaagatt 540
 ccctcctggt gcccatcttg atagacaagg tcatggacgg gaagggccaa agccctttga 600
 ccctgttcac aagcacacaa gctgtcttgg tcgatgggat gctttattcc ggcaccatga 660


```

acaacttcct gggcagcgag cccatcctga tgcggacact gggatcccat cctgttctca 720
agactgacat cttcttacgc tggctgcacg cggatgcctc cttcgtggca gccattccat 780
ccacccaggt cgtctatttc ttctttgagg agacagccag cgagtttgac ttctttgaag 840
agctgtatat atccaggggtg gctcaagtct gcaagaacga cgtgggcggt gaaaagctgc 900
tgcagaagaa gtggaccacc ttctctaaag cccagttgct ctgcgctcag ccagggcagc 960
tgccattcaa catcatccgc cacgcggtcc tgctgcccgc cgattctccc tctgtttccc 1020
gcatctacgc agtctttacc tcccagtggc aggttggcgg gaccaggagc tcagcagtct 1080
gtgccttctc tctcacggac attgagcgag tctttaaagg gaagtacaag gagctgaaca 1140
aggagacctc ccgctggacc acttaccggg gctcagaggt cagcccagg ccaggcagtt 1200
gctccatggg cccctcctct gacaaagcct tgaccttcat gaaggaccat tttctgatgg 1260
atgagcacgt ggtaggaaca cccctgctgg tgaagtctgg tgtggagtac acacggcttg 1320
ctgtggagtc agctcggggc cttgatggga gcagccatgt ggtcatgtat ctgggtacct 1380
ccacgggtcc cctgcacaag gctgtggtgc ctcaggacag cagtgttat ctcgtggagg 1440
agattcagct gagccctgac tctgagcctg ttcgaaacct gcagctggcc cccgcccagg 1500
gtgcagtgtt tgcaggcttc tctggaggca tctggagagt tcccagggcc aattgcagtg 1560
tctacgagag ctgtgtggac tgtgtgcttg ccagggaccc tctactgtgc tgggaccttg 1620
aatcaagact ctgcagcctt ctgtctggct ctaccaagcc ttggaagcag gacatggaac 1680
gcggcaaccc ggagtgggta tgcacccgtg gccccatggc caggagcccc cggcgctcaga 1740
gccccctca actaattaa gaagtcctga cagtcccaa ctccatcctg gagctgcgct 1800
gccccacct gtcagcactg gcctcttacc actggagtca tggccgagcc aaaatctcag 1860
aagcctctgc taccgtctac aatggctccc tcttgctgct gccgcaggat ggtgtcgggg 1920
gcctctacca gtgtgtggcg actgagaacg gctactcata ccctgtggtc tcctattggg 1980
tagacagcca ggaccagccc ctggcgctgg accctgagct ggcgggcgtt ccccgtagc 2040
gtgtgcaggt cccgctgacc agggctcgag gcggagcttc catggctgcc cagcggtcct 2100
actggcccca ttttctcatc gttaccgtcc tcttgccat cgtgctcctg ggagtgtc 2160
ctctctctct cgcttcccca ctgggggcgc tgcgggctcg gggtaagggt cagggtgtg 2220
ggatgctgcc ccccagggaa aaggctccac tgagcaggga ccagcacctc cagccctcca 2280
aggaccacag gacctctgcc agtgacgtag atgccgacaa caaccatctg ggcgccgaag 2340
tggtttaaac agggacacag atccgcagct gagcagagca agccactggc cttgttggct 2400
atgccaggga cagtgccact ctgaccaggg taggaggctc tcctgctaac gtgtgtcacc 2460
tacagcacc agtaggtcct cccctgtggg actctcttct gcaagcacat tgggtgtct 2520
ccatacctgt acttgctgtg tgacaggaag agccagacag gtttctttga ttttgattga 2580
cccaagagcc ctgcctgtaa caaacgtgct ccaggagacc atgaaagggtg tggctgtctg 2640
ggattctgtg gtgacaaacc taagcatccg agcaagctgg ggctattcct gcaaactcca 2700
tcctgaacgc tgtcactcta gaagcagctg ctgctttgaa caccagccca ccctccttcc 2760
caagagtctc tatggagttg gccccttgtg tttcctttac cagtcggggc atactgtttg 2820
ggaagtcatc tctgaagtct aaccaccttc cttcttgggt cagtttggac agattgttat 2880
tattgtctct gccctggcta gaatgggggc ataactctgag ccttgttccc ttgtccagt 2940
tggctgaccc ttgacctctt ccttctctct ccctttgttt tgggattcag aaaactgctt 3000
gtcacagaca atttattttt tattaaaaaa gatataagct ttaaag 3046

```

<210> 448
 <211> 1436
 <212> PRT
 <213> Bovine

<400> 448
 Met Ala Leu Gly Arg His Leu Ser Leu Arg Gly Leu Cys Val Leu Leu
 1 5 10 15
 Leu Gly Thr Met Val Gly Gly Gln Ala Leu Glu Leu Arg Leu Lys Asp
 20 25 30
 Gly Val His Arg Cys Glu Gly Arg Val Glu Val Lys His Gln Gly Glu
 35 40 45
 Trp Gly Thr Val Asp Gly Tyr Arg Trp Thr Leu Lys Asp Ala Ser Val
 50 55 60
 Val Cys Arg Gln Leu Gly Cys Gly Ala Ala Ile Gly Phe Pro Gly Gly
 65 70 75 80

Ala	Tyr	Phe	Gly	Pro	Gly	Leu	Gly	Pro	Ile	Trp	Leu	Leu	Tyr	Thr	Ser
			85						90					95	
Cys	Glu	Gly	Thr	Glu	Ser	Thr	Val	Ser	Asp	Cys	Glu	His	Ser	Asn	Ile
			100					105					110		
Lys	Asp	Tyr	Arg	Asn	Asp	Gly	Tyr	Asn	His	Gly	Arg	Asp	Ala	Gly	Val
		115					120					125			
Val	Cys	Ser	Gly	Phe	Val	Arg	Leu	Ala	Gly	Gly	Asp	Gly	Pro	Cys	Ser
	130					135					140				
Gly	Arg	Val	Glu	Val	His	Ser	Gly	Glu	Ala	Trp	Ile	Pro	Val	Ser	Asp
145					150					155					160
Gly	Asn	Phe	Thr	Leu	Ala	Thr	Ala	Gln	Ile	Ile	Cys	Ala	Glu	Leu	Gly
				165					170						175
Cys	Gly	Lys	Ala	Val	Ser	Val	Leu	Gly	His	Glu	Leu	Phe	Arg	Glu	Ser
			180					185					190		
Ser	Ala	Gln	Val	Trp	Ala	Glu	Glu	Phe	Arg	Cys	Glu	Gly	Glu	Glu	Pro
	195					200						205			
Glu	Leu	Trp	Val	Cys	Pro	Arg	Val	Pro	Cys	Pro	Gly	Gly	Thr	Cys	His
	210					215					220				
His	Ser	Gly	Ser	Ala	Gln	Val	Val	Cys	Ser	Ala	Tyr	Ser	Glu	Val	Arg
225					230					235					240
Leu	Met	Thr	Asn	Gly	Ser	Ser	Gln	Cys	Glu	Gly	Gln	Val	Glu	Met	Asn
				245					250						255
Ile	Ser	Gly	Gln	Trp	Arg	Ala	Leu	Cys	Ala	Ser	His	Trp	Ser	Leu	Ala
			260					265					270		
Asn	Ala	Asn	Val	Ile	Cys	Arg	Gln	Leu	Gly	Cys	Gly	Val	Ala	Ile	Ser
	275						280					285			
Thr	Pro	Gly	Gly	Pro	His	Leu	Val	Glu	Glu	Gly	Asp	Gln	Ile	Leu	Thr
	290					295					300				
Ala	Arg	Phe	His	Cys	Ser	Gly	Ala	Glu	Ser	Phe	Leu	Trp	Ser	Cys	Pro
305					310					315					320
Val	Thr	Ala	Leu	Gly	Gly	Pro	Asp	Cys	Ser	His	Gly	Asn	Thr	Ala	Ser
				325					330					335	
Val	Ile	Cys	Ser	Gly	Asn	Gln	Ile	Gln	Val	Leu	Pro	Gln	Cys	Asn	Asp
		340						345					350		
Ser	Val	Ser	Gln	Pro	Thr	Gly	Ser	Ala	Ala	Ser	Glu	Asp	Ser	Ala	Pro
		355					360					365			
Tyr	Cys	Ser	Asp	Ser	Arg	Gln	Leu	Arg	Leu	Val	Asp	Gly	Gly	Gly	Pro
	370					375					380				
Cys	Ala	Gly	Arg	Val	Glu	Ile	Leu	Asp	Gln	Gly	Ser	Trp	Gly	Thr	Ile
385					390					395					400
Cys	Asp	Asp	Gly	Trp	Asp	Leu	Asp	Asp	Ala	Arg	Val	Val	Cys	Arg	Gln
				405					410					415	
Leu	Gly	Cys	Gly	Glu	Ala	Leu	Asn	Ala	Thr	Gly	Ser	Ala	His	Phe	Gly
			420					425					430		
Ala	Gly	Ser	Gly	Pro	Ile	Trp	Leu	Asp	Asn	Leu	Asn	Cys	Thr	Gly	Lys
	435						440					445			
Glu	Ser	His	Val	Trp	Arg	Cys	Pro	Ser	Arg	Gly	Trp	Gly	Gln	His	Asn
	450					455					460				
Cys	Arg	His	Lys	Gln	Asp	Ala	Gly	Val	Ile	Cys	Ser	Glu	Phe	Leu	Ala
465					470					475					480
Leu	Arg	Met	Val	Ser	Glu	Asp	Gln	Gln	Cys	Ala	Gly	Trp	Leu	Glu	Val
				485					490					495	
Phe	Tyr	Asn	Gly	Thr	Trp	Gly	Ser	Val	Cys	Arg	Asn	Pro	Met	Glu	Asp
		500						505					510		
Ile	Thr	Val	Ser	Thr	Ile	Cys	Arg	Gln	Leu	Gly	Cys	Gly	Asp	Ser	Gly
	515						520					525			
Thr	Leu	Asn	Ser	Ser	Val	Ala	Leu	Arg	Glu	Gly	Phe	Arg	Pro	Gln	Trp

530		535		540
Val Asp Arg Ile Gln Cys	Arg Lys Thr Asp Thr Ser Leu Trp Gln Cys			
545	550	555		560
Pro Ser Asp Pro Trp Asn Tyr Asn Ser Cys Ser Pro Lys Glu Glu Ala				
	565	570		575
Tyr Ile Trp Cys Ala Asp Ser Arg Gln Ile Arg Leu Val Asp Gly Gly				
	580	585		590
Gly Arg Cys Ser Gly Arg Val Glu Ile Leu Asp Gln Gly Ser Trp Gly				
	595	600		605
Thr Ile Cys Asp Asp Arg Trp Asp Leu Asp Asp Ala Arg Val Val Cys				
	610	615		620
Lys Gln Leu Gly Cys Gly Glu Ala Leu Asp Ala Thr Val Ser Ser Phe				
	625	630		635
Phe Gly Thr Gly Ser Gly Pro Ile Trp Leu Asp Glu Val Asn Cys Arg				
	645	650		655
Gly Glu Glu Ser Gln Val Trp Arg Cys Pro Ser Trp Gly Trp Arg Gln				
	660	665		670
His Asn Cys Asn His Gln Glu Asp Ala Gly Val Ile Cys Ser Gly Phe				
	675	680		685
Val Arg Leu Ala Gly Gly Asp Gly Pro Cys Ser Gly Arg Val Glu Val				
	690	695		700
His Ser Gly Glu Ala Trp Thr Pro Val Ser Asp Gly Asn Phe Thr Leu				
	705	710		715
Pro Thr Ala Gln Val Ile Cys Ala Glu Leu Gly Cys Gly Lys Ala Val				
	725	730		735
Ser Val Leu Gly His Met Pro Phe Arg Glu Ser Asp Gly Gln Val Trp				
	740	745		750
Ala Glu Glu Phe Arg Cys Asp Gly Gly Glu Pro Glu Leu Trp Ser Cys				
	755	760		765
Pro Arg Val Pro Cys Pro Gly Gly Thr Cys Leu His Ser Gly Ala Ala				
	770	775		780
Gln Val Val Cys Ser Val Tyr Thr Glu Val Gln Leu Met Lys Asn Gly				
	785	790		795
Thr Ser Gln Cys Glu Gly Gln Val Glu Met Lys Ile Ser Gly Arg Trp				
	805	810		815
Arg Ala Leu Cys Ala Ser His Trp Ser Leu Ala Asn Ala Asn Val Val				
	820	825		830
Cys Arg Gln Leu Gly Cys Gly Val Ala Ile Ser Thr Pro Arg Gly Pro				
	835	840		845
His Leu Val Glu Gly Gly Asp Gln Ile Ser Thr Ala Gln Phe His Cys				
	850	855		860
Ser Gly Ala Glu Ser Phe Leu Trp Ser Cys Pro Val Thr Ala Leu Gly				
	865	870		875
Gly Pro Asp Cys Ser His Gly Asn Thr Ala Ser Val Ile Cys Ser Gly				
	885	890		895
Asn His Thr Gln Val Leu Pro Gln Cys Asn Asp Phe Leu Ser Gln Pro				
	900	905		910
Ala Gly Ser Ala Ala Ser Glu Glu Ser Ser Pro Tyr Cys Ser Asp Ser				
	915	920		925
Arg Gln Leu Arg Leu Val Asp Gly Gly Gly Pro Cys Gly Gly Arg Val				
	930	935		940
Glu Ile Leu Asp Gln Gly Ser Trp Gly Thr Ile Cys Asp Asp Asp Trp				
	945	950		955
Asp Leu Asp Asp Ala Arg Val Val Cys Arg Gln Leu Gly Cys Gly Glu				
	965	970		975
Ala Leu Asn Ala Thr Gly Ser Ala His Phe Gly Ala Gly Ser Gly Pro				
	980	985		990

Ile Trp Leu Asp Asp Leu Asn Cys Thr Gly Lys Glu Ser His Val Trp
 995 1000 1005
 Arg Cys Pro Ser Arg Gly Trp Gly Arg His Asp Cys Arg His Lys Glu
 1010 1015 1020
 Asp Ala Gly Val Ile Cys Ser Glu Phe Leu Ala Leu Arg Met Val Ser
 1025 1030 1035 1040
 Glu Asp Gln Gln Cys Ala Gly Trp Leu Glu Val Phe Tyr Asn Gly Thr
 1045 1050 1055
 Trp Gly Ser Val Cys Arg Ser Pro Met Glu Asp Ile Thr Val Ser Val
 1060 1065 1070
 Ile Cys Arg Gln Leu Gly Cys Gly Asp Ser Gly Ser Leu Asn Thr Ser
 1075 1080 1085
 Val Gly Leu Arg Glu Gly Ser Arg Pro Arg Trp Val Asp Leu Ile Gln
 1090 1095 1100
 Cys Arg Lys Met Asp Thr Ser Leu Trp Gln Cys Pro Ser Gly Pro Trp
 1105 1110 1115 1120
 Lys Tyr Ser Ser Cys Ser Pro Lys Glu Glu Ala Tyr Ile Ser Cys Glu
 1125 1130 1135
 Gly Arg Arg Pro Lys Ser Cys Pro Thr Ala Ala Ala Cys Thr Asp Arg
 1140 1145 1150
 Glu Lys Leu Arg Leu Arg Gly Gly Asp Ser Glu Cys Ser Gly Arg Val
 1155 1160 1165
 Glu Val Trp His Asn Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp
 1170 1175 1180
 Ser Leu Ala Glu Ala Glu Val Val Cys Gln Gln Leu Gly Cys Gly Gln
 1185 1190 1195 1200
 Ala Leu Glu Ala Val Arg Ser Ala Ala Phe Gly Pro Gly Asn Gly Ser
 1205 1210 1215
 Ile Trp Leu Asp Glu Val Gln Cys Gly Gly Arg Glu Ser Ser Leu Trp
 1220 1225 1230
 Asp Cys Val Ala Glu Pro Trp Gly Gln Ser Asp Cys Lys His Glu Glu
 1235 1240 1245
 Asp Ala Gly Val Arg Cys Ser Gly Val Arg Thr Thr Leu Pro Thr Thr
 1250 1255 1260
 Thr Ala Gly Thr Arg Thr Thr Ser Asn Ser Leu Pro Gly Ile Phe Ser
 1265 1270 1275 1280
 Leu Pro Gly Val Leu Cys Leu Ile Leu Gly Ser Leu Leu Phe Leu Val
 1285 1290 1295
 Leu Val Ile Leu Val Thr Gln Leu Leu Arg Trp Arg Ala Glu Arg Arg
 1300 1305 1310
 Ala Leu Ser Ser Tyr Glu Asp Ala Leu Ala Glu Ala Val Tyr Glu Glu
 1315 1320 1325
 Leu Asp Tyr Leu Leu Thr Gln Lys Glu Gly Leu Gly Ser Pro Asp Gln
 1330 1335 1340
 Met Thr Asp Val Pro Asp Glu Asn Tyr Asp Asp Ala Glu Glu Val Pro
 1345 1350 1355 1360
 Val Pro Gly Thr Pro Ser Pro Ser Gln Gly Asn Glu Glu Glu Val Pro
 1365 1370 1375
 Pro Glu Lys Glu Asp Gly Val Arg Ser Ser Gln Thr Gly Ser Phe Leu
 1380 1385 1390
 Asn Phe Ser Arg Glu Ala Ala Asn Pro Gly Glu Gly Glu Glu Ser Phe
 1395 1400 1405
 Trp Leu Leu Gln Gly Lys Lys Gly Asp Ala Gly Tyr Asp Asp Val Glu
 1410 1415 1420
 Leu Ser Ala Leu Gly Thr Ser Pro Val Thr Phe Ser
 1425 1430 1435

<210> 449
 <211> 4308
 <212> DNA
 <213> Bovine

<400> 449
 atggctctgg gcagacacct ctccctgcgg ggactctgtg tctcctcct cggcaccatg 60
 gtgggtgggtc aagctctgga gctgaggttg aaggatggag tccatcgctg tgaggggaga 120
 gtggaagtga agcaccaagg agaatggggc acagtggatg gttacaggtg gacattgaag 180
 gatgcatctg tagtgtgcag acagctgggg tgtggagctg ccattgggtt tcctggaggg 240
 gcttattttg ggccaggact tggccccatt tggcttttgt atacttcatg tgaagggaca 300
 gagtcaactg tcagtgactg tgagcattct aatattaaag actatcgtaa tgatggctat 360
 aatcatgggtc gggatgctgg agtagtctgc tcaggatttg tgcgtctggc tggaggggat 420
 ggaccctgct cagggcgagt agaagtgcag tctggagaag cttggatccc agtgtctgat 480
 gggaacttca cacttgccac tgcccagatc atctgtgcag agttgggttg tggcaaggct 540
 gtgtctgtcc tgggacatga gctcttcaga gagtccagtg cccaggtctg ggctgaagag 600
 ttcaggtgtg agggggagga gcctgagctc tgggtctgcc ccagagtgcc ctgtccaggg 660
 ggcacgtgtc accacagtgg atctgctcag gttgtttgtt cagcatactc agaagtcagg 720
 ctcatgacaa acggctcctc tcagtgtgaa gggcaggtgg agatgaacat ttctggacaa 780
 tggagagcgc tctgtgcctc ccactggagt ctggccaatg ccaatgttat ctgtcgtcag 840
 ctcggtctgtg gagtgtccat ctccaccccc ggaggaccac acttggtgga agaaggtgat 900
 cagatcctaa cagcccgatt tcaactgctc ggggctgagt ccttctctgt gagttgtcct 960
 gtgactgccc tgggtgggtc tgactgttcc catggcaaca cagcctctgt gatctgctca 1020
 ggaaaccaga tccaggtgct tccccagtgc aacgactccg tgtctcaacc tacaggctct 1080
 gcggcctcag aggacagcgc cccctactgc tcagacagca ggcagctccg cctgggtggac 1140
 gggggcggtc cctgcgccgg gagagtggag atccttgacc agggctcctg gggcaccatc 1200
 tgtgatgacg gctgggacct ggacgatgcc cgcgtggtgt gcaggcagct gggctgtgga 1260
 gaagccctca atgccacggg gtctgtcac ttcggggcag gatcagggcc catctggttg 1320
 gacaacttga actgcacagg aaaggagtcc caggtgtgga ggtgcccttc ccggggctgg 1380
 gggcagcaca atgcagaca caagcaggac gcgggggtca tctgtcaga gttcctggcc 1440
 ctcaggatgg tgagtgaaga ccagcagtgt gctgggtggc tggaaagttt ctacaatggg 1500
 acctggggca gtgtctgccg taaccccatg gaagacatca ctgtgtccac gatctgcaga 1560
 cagcttgggt gtggggacag tggaaacctc aactcttctg ttgtcttag agaaggtttt 1620
 agggcacagt ggggtggatg aatccagtgt cggaaaactg acacctctct ctggcagtgt 1680
 ccttctgacc cttggaatta caactcatgc tctccaaagg aggaagccta tatctggtgt 1740
 gcagacagca gacagatccg cctggtggat ggaggtgggt gctgctctgg gagagtggag 1800
 atccttgacc agggctcctg gggcaccatc tgtgatgacc gctgggacct ggacgatgcc 1860
 cgtgtggtgt gcaagcagct gggctgtgga gaagccctgg acgccactgt ctcttccttc 1920
 ttcgggacgg gatcagggcg catctggctg gatgaagtga actgcagagg agaggatgcc 1980
 caagtatgga ggtgcccttc ctggggatgg cggcaacaca actgcaatca tcaagaagat 2040
 gcaggagtca tctgtcagc atttgtgctg ctggctggag gagatggacc ctgctcaggg 2100
 cgagtagaag tgcattctgg agaagcctgg accccagtgt ctgatggaaa cttcacactc 2160
 cccactgccc aggtcatctg tgcagagctg ggatgtggca aggtctgtgc tgtcctggga 2220
 cacatgccat tcagagagtc cgatggccag gtctgggctg aagagttcag gtgtgatggg 2280
 ggggagcctg agctctggtc ctgccccaga gtgccctgtc caggaggcac atgtctccac 2340
 agtggagctg ctcaggttgt ctgttcagtg tacacagaag tccagcttat gaaaaacggc 2400
 acctctcaat gtgaggggca ggtggagatg aagatctctg gacgatggag agcgctctgt 2460
 gcctcccact ggagctctgg caatgccaat gttgtctgtc gtcagctcgg ctgtggagtc 2520
 gccatctcca cccccagagg accacacttg gtggaaggag gtgatcagat ctcaacagcc 2580
 caatttcaat gctcaggggc tgagtccttc ctgtggagtt gtcctgtgac tgccttgggt 2640
 gggcctgact gttcccatgg caacacagcc tctgtgatct gctcaggaaa ccacaccag 2700
 gtgctgcccc agtgcaacga cttcctgtct caacctgcag gctctgcggc ctgagaggag 2760
 agttctccct actgctcaga cagcaggcag ctccgcctgg tggacggggg cggctccctgc 2820
 ggggggagag tggagatcct tgaccagggc tccctggggca ccatctgtga tgatgactgg 2880
 gacctggacg atgcccgtgt ggtgtgcagg cagctgggct gtggagaagc cctcaatgcc 2940
 acggggctctg ctcaactcgg ggcaggatca gggcccatct ggctggacga cctgaactgc 3000

```

acaggaaagg agtcccacgt. gtggaggtgc ctttcccggg gctggggggcg gcacgactgc 3060
agacacaagg aggacgccgg ggtcatctgc tcagagttcc tggccctcag gatggtgagc 3120
gaggaccagc agtgtgctgg gtggctggag gttttctaca acgggacctg gggcagtgtc 3180
tgccgcagcc ccatggaaga tatcactgtg tccgtgatct gcagacagct tggatgtggg 3240
gacagtggaa gtctcaacac ctctgttggg ctcaggggaag gttctagacc ccggtgggta 3300
gatttaattc agtgtcggaa aatggatacc tctctctggc agtgtccttc tggcccatgg 3360
aaatacagtt catgctctcc aaaggaggaa gcctacatct catgtgaagg aagaagaccc 3420
aagagctgtc caactgctgc cgcctgcaca gacagagaga agctccgcct caggggagga 3480
gacagcgagt gctcagggcg ggtggaggtg tggcacaacg gctcctgggg caccgtgtgc 3540
gatgactcct ggagcctggc agaggctgag gtggtgtgtc agcagctggg ctgtggccag 3600
gccctggaag ccgtgccgtc tgcagcattt ggccctggaa atgggagcat ctggctggac 3660
gaggtgcagt gcgggggccg ggagtccctc ctgtgggact gtgttgcgga gccctggggg 3720
cagagcgact gcaagcacga ggaggatgct ggtgtgaggt gctctggtgt aaggacaaca 3780
ttgcccacga ccacagcagg gaccagaaca acctcaaatt ctctccctgg catcttctcc 3840
ctgcctgggg ttctctgcct taccctgggg tcgttctctt tcctggctct cgtcatcctg 3900
gtgactcagc tactcagatg gagagcagag cgcagagcct tatccagcta tgaagatgct 3960
cttgctgaag ctgtgtatga ggagctcgat taccttctga cacagaagga aggtctgggc 4020
agcccagatc agatgactga tgtccctgat gaaaattatg atgatgctga agaagtacca 4080
gtgcctggaa ctcttctctc ctctcagggg aatgaggagg aagtgcccc agagaaggag 4140
gacggggtga ggtcctctca gacaggctct ttctgaact tctccagaga ggcagcta 4200
cctggggaag gagaagagag cttctggctg ctccagggga agaaagggga tgctgggtat 4260
gatgatgttg aactcagtg cctgggaaca tcccagtgta ctttctcg 4308

```

<210> 450

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Domain consensus sequence

<221> VARIANT

<222> (1)...(1)

<223> Xaa at position 1 can be L, I or V

<221> VARIANT

<222> (2)...(2)

<223> Xaa at position 2 can be any amino acid

<221> VARIANT

<222> (3)...(3)

<223> Xaa at position 3 can be L, I or V

<221> VARIANT

<222> (4)...(5)

<223> Xaa at positions 4 and 5 can be any amino acid.
One or both of of residues 4 and 5 can be present.

<221> VARIANT

<222> (7)...(7)

<223> Xaa at position 7 can be any amino acid

<221> VARIANT

<222> (10)...(10)

<223> Xaa at position 10 can be N or H

<221> VARIANT

<222> (11)...(11)
 <223> Xaa at position 11 can be any amino acid

 <400> 450
 Xaa Xaa Xaa Xaa Xaa Asp Xaa Asn Asp Xaa Xaa Pro
 1 5 10

 <210> 451
 <211> 16
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Domain consensus sequence

 <221> VARIANT
 <222> (1)...(1)
 <223> Xaa at position 1 can be L, I, A or T

 <221> VARIANT
 <222> (2)...(4)
 <223> Xaa at positions 2, 3 and 4 can be any amino acid

 <221> VARIANT
 <222> (6)...(7)
 <223> Xaa at positions 6 and 7 can be any amino acid.
 One or both of of residues 6 and 7 can be present.

 <221> VARIANT
 <222> (8)...(8)
 <223> Xaa at position 8 can be P or E

 <221> VARIANT
 <222> (9)...(10)
 <223> Xaa at positions 9 and 10 can be any amino acid

 <221> VARIANT
 <222> (11)...(11)
 <223> Xaa at position 11 can be L, I, V, M, F or Y

 <221> VARIANT
 <222> (12)...(12)
 <223> Xaa at position 12 can be D, E, N, Q or S

 <221> VARIANT
 <222> (13)...(13)
 <223> Xaa at position 13 can be S, T or A

 <221> VARIANT
 <222> (14)...(14)
 <223> Xaa at position 14 can be A or V

 <221> VARIANT
 <222> (15)...(15)
 <223> Xaa at position 15 can be L, I, V, M, F or Y

<400> 451
Xaa Xaa Xaa Xaa Trp Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

<210> 452
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Domain consensus sequence

<221> VARIANT
<222> (1)...(1)
<223> Xaa at position 1 can be G, S, T, A, L, I, V, or N

<221> VARIANT
<222> (2)...(3)
<223> Xaa at positions 2 and 3 can be any amino acid

<221> VARIANT
<222> (6)...(6)
<223> Xaa at position 6 can be L, I, V, M, F, Y, or W

<221> VARIANT
<222> (7)...(7)
<223> Xaa at position 7 can be D, E, G, H, R, K, or P

<221> VARIANT
<222> (9)...(9)
<223> Xaa at position 9 can be any amino acid

<221> VARIANT
<222> (10)...(10)
<223> Xaa at position 10 can be L, I, V, M, F, Y, W, G,
S, P, or Q

<400> 452
Xaa Xaa Xaa His Glu Xaa Xaa His Xaa Xaa
1 5 10

<210> 453
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Domain consensus sequence

<221> VARIANT
<222> (4)...(4)
<223> Xaa at position 4 can be G or N

<221> VARIANT

<222> (5)...(5)
 <223> Xaa at position 5 can be any amino acid

 <221> VARIANT
 <222> (7)...(7)
 <223> Xaa at position 7 can be D or R

 <221> VARIANT
 <222> (8)...(8)
 <223> Xaa at position 8 can be L, I, V, S, A, P, K, or Q

 <221> VARIANT
 <222> (1)...(8)
 <223> Xaa = Any Amino Acid

 <400> 453
 Pro Arg Cys Xaa Xaa Pro Xaa Xaa
 1 5

 <210> 454
 <211> 38
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Domain consensus sequence

 <221> VARIANT
 <222> (1)...(12)
 <223> Xaa at positions, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10,
 11 and 12 can be any amino acid

 <221> VARIANT
 <222> (14)...(16)
 <223> Xaa at positions 14, 15 and 16 can be any amino
 acid

 <221> VARIANT
 <222> (18)...(18)
 <223> Xaa at position 18 can be any amino acid

 <221> VARIANT
 <222> (20)...(25)
 <223> Xaa at positions 20, 21, 22, 23, 24 and 25 can be
 any amino acid

 <221> VARIANT
 <222> (26)...(26)
 <223> Xaa at position 26 can be D, E or N

 <221> VARIANT
 <222> (27)...(27)
 <223> Xaa at position 27 can be any amino acid

 <221> VARIANT
 <222> (28)...(28)

<223> Xaa at position 28 can be L, I, V, M, F, or Y

<221> VARIANT

<222> (29)...(37)

<223> Xaa at positions 29, 30, 31, 32, 33, 34, 35, 36
and 37 can be any amino acid

<221> VARIANT

<222> (38)...(38)

<223> Xaa at position 38 can be F, Y or W

<400> 454

Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Glu	Xaa	Xaa	Xaa
1			5				10						15		
Glu	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
		20					25					30			
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa										
		35													

<210> 455

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Domain consensus sequence

<221> VARIANT

<222> (1)...(1)

<223> Xaa at position 1 can be F or Y

<221> VARIANT

<222> (6)...(6)

<223> Xaa at position 6 can be D, N or R

<221> VARIANT

<222> (1)...(6)

<223> Xaa = Any Amino Acid

<400> 455

Xaa	Cys	Arg	Asn	Pro	Xaa
1			5		

<210> 456

<211> 38

<212> PRT

<213> Artificial Sequence

<220>

<223> Domain consensus sequence

<221> VARIANT

<222> (2)...(6)

<223> Xaa at positions 2, 3, 4, 5 and 6 can be any amino
acid

<221> VARIANT
 <222> (8)...(9)
 <223> Xaa at positions 8 and 9 can be any amino acid

<221> VARIANT
 <222> (11)...(16)
 <223> Xaa at positions 11, 12, 13, 14, 15 and 16 can be any amino acid

<221> VARIANT
 <222> (19)...(20)
 <223> Xaa at positions 19 and 20 can be any amino acid

<221> VARIANT
 <222> (22)...(24)
 <223> Xaa at positions 22, 23 and 24 can be any amino acid

<221> VARIANT
 <222> (25)...(25)
 <223> Xaa at position 25 can be F, Y or W

<221> VARIANT
 <222> (26)...(33)
 <223> Xaa at positions 26, 27, 28, 29, 30, 31, 32 and 33 can be any amino acid

<221> VARIANT
 <222> (35)...(37)
 <223> Xaa at positions 35, 36 and 37 can be any amino acid

<400> 456
 Gly Xaa Xaa Xaa Xaa Xaa Gly Xaa Xaa Glu Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15
 Trp Gly Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30
 Xaa Cys Xaa Xaa Xaa Gly
 35

<210> 457
 <211> 26
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Domain consensus sequence

<221> VARIANT
 <222> (1)...(3)
 <223> Xaa at positions 1, 2 and 3 can be any amino acid

<221> VARIANT
 <222> (5)...(5)

<223> Xaa at position 5 can be any amino acid

<221> VARIANT
 <222> (6)...(6)
 <223> Xaa at position 6, when present, can be any amino acid

<221> VARIANT
 <222> (7)...(7)
 <223> Xaa at position 7 can be E or Q

<221> VARIANT
 <222> (8)...(11)
 <223> Xaa at positions 8, 9, 10 and 11 can be any amino acid

<221> VARIANT
 <222> (12)...(12)
 <223> Xaa at position 12 can be L, I, V or M

<221> VARIANT
 <222> (13)...(13)
 <223> Xaa at position 13, when present, can be any amino acid

<221> VARIANT
 <222> (14)...(14)
 <223> Xaa at position 14 can be E, Q or K

<221> VARIANT
 <222> (15)...(25)
 <223> Xaa at positions 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 and 25 can be any amino acid

<400> 457
 Xaa Xaa Xaa Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro
 20 25

<210> 458
 <211> 22
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Leucine Zipper Region of TANGO 366

<400> 458
 Leu Asp Leu Ser Gly Thr Asn Leu Val Pro Leu Pro Glu Ala Leu Leu
 1 5 10 15
 Leu His Leu Pro Ala Leu
 20

<210> 459
 <211> 22
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Leucine Zipper Region of INTERCEPT 217

<400> 459
 Leu Ser Cys Thr Gly Leu Gly Leu Gln Asp Val Pro Ala Glu Leu Pro
 1 5 10 15
 Ala Ala Thr Ala Asp Leu
 20

<210> 460
 <211> 22
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Leucine Zipper Region of TANGO 331

<400> 460
 Leu Glu Ala Gln Glu Glu His Leu Glu Ala Trp Trp Leu Gln Leu Lys
 1 5 10 15
 Ser Glu Tyr Pro Asp Leu
 20